

COD: MODERN WARFARE 3 REVIEWED

NORTH  
AMERICAN  
EDITION

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JRPG HEAVEN

PERSONA 5  
TACTICA  
SUPERB TURN-  
BASED TACTICS

THE NEW SIMS

EVERYWHERE  
PLAYERS BECOME  
GAME DESIGNERS



FUTURE

ISSUE 380

WORLD EXCLUSIVE ACCESS

# HOMEWORLD 3

COMMAND MASSIVE-SCALE SPACE BATTLES  
IN A MIND-BENDING NEW SCI-FI ADVENTURE



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# “HOMEWORLD TOOK THE RTS GENRE TO AN EPIC NEW SCALE”



**ROBERT JONES**

Twitter  
@rnicholasj

**This month**

Journeyed far into deep space to visit the PC Gamer homeworld. Became Fleet Command in the battle against the evil Console Gamer interstellar empire.

as you can discover in our lead feature this month, the series is about to hit incredible new heights.

**ROBERT JONES**  
**PRINT EDITOR**  
robert.jones@futurenet.com



The original *Homeworld* absolutely blew my mind when I first played it back at the turn of the last century. It took the RTS genre to an epic, previously unseen new scale, and partnered that with a gripping hard sci-fi narrative that felt incredibly fresh.

More *Homeworld* games followed, but since 2003’s *Homeworld 2*, a third main game has remained lost in space. In 2024, though, Blackbird Interactive and Gearbox are warping in *Homeworld 3*, and

## The PC Gamer team



**IAN EVENDEN**

Twitter  
@ieunden

**This month**

Beheld a portal to the underworld. Cursed whoever had built it at the top of a mountain.



**FRASER BROWN**

Twitter  
@FraserIBrown

**This month**

Persuaded and lied like a devious cad in order to trouser free drinks at the PC Gamer Towers bar.



**HARVEY RANDALL**

Twitter  
@HJRwithpen

**This month**

Held a Jay Gatsby-style party in Utopia City. There was jelly, balloons and, of course, absinthe.



**WES S'JET**

Twitter  
@wesleyfenlon

**This month**

Legally changed his name to Wes S'Jet. Browsed rental properties on Hiigara.

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# Contents

#380

MARCH 2024

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## Monitor

### 08 THE TOP STORY

GTA VI gets a dramatic reveal trailer

### 10 SPECIAL REPORT

How publisher Apogee Software shook up '90s PC gaming

### 12 SECRET LEVEL

Alena Dubrovina on designing armor and clothing for videogames

## Previews

### 14 Everywhere

### 18 Chiyo

### 20 Lethal Company

### 24 Death Must Die

### 26 Unforetold: Witchstone

## Features

### 30 Homeworld 3

### 40 Train Sim World 4

26



## 14 EVERYWHERE

Harvey Randall gets a first look at genre-bending new sandbox game *Everywhere*, and discovers how it is being designed to make gamers into game designers.

## 30 HOMEWORLD 3

Wes Fenlon travels to Vancouver to go hands-on with Blackbird Interactive's *Homeworld 3*, the epic-looking new game in the famed space-based RTS series.

## 40 ART OF THE SIM

Simulation expert Phil Iwaniuk visits *Train Sim World 4* developer, Dovetail Games, to go hands-on with its new railroad game and discuss the art of making a great simulation.





## 50 COD: MODERN WARFARE III

Morgan Park combs his SAS-grade mustache before going on a tough *MWIII* reviewing mission.

## 92 REINSTALL: HOMEWORLD

Ian Evenden replays the original space-based RTS to see if it still offers a stellar experience in 2023.

## 98 PC GAMING CONTROLLERS

The PCG hardware lab goes hands-on with six top PC gaming control pads to see which is best.

## Reviews

- 50 CoD: Modern Warfare III
- 56 Persona 5 Tacticala
- 60 Thirsty Suitors
- 62 Like a Dragon Gaiden
- 66 Nunu
- 68 Warhammer: Age of Sigmar: Realms of Ruin

### FREE GAMES

- 72 Moonring
- 73 Stop Burying Me Alive, Beautiful!
- 73 Dancing Duelists

### THEY'RE BACK

- 74 LA Noire
- 75 Darkside Detective
- 75 The Sinking City

## Extra Life

### 76 NOW PLAYING

*Divinity: Original Sin II*, *Max Payne*, *Jusant*, *Stardew Valley*

### 80 UPDATE

How the free *Counter-Strike 2* update has changed the CS: GO game

### 83 MOD SPOTLIGHT

Turn *Cyrodil* into a battleground with *Nickies' Worldwide NPC Gang War*

### 84 HOW TO

Survive zombies in *Modern Warfare III*

### 86 DIARY

A *Baldur's Gate III* bard's tale, part four

### 90 WHY I LOVE

The joy of role-playing in MMOs

### 92 REINSTALL

Does *Homeworld* still hold up today?

### 96 MUST PLAY

*Command & Conquer: Tiberian Sun*, *Jagged Alliance 3*, *Rhythm Doctor*, *Age of Wonders 4*, *Hacknet*, *Alpha Protocol*, *Alan Wake 2*, *Yakuza 5 Remastered*

## Hardware

### 98 GROUP TEST

### 104 TECH REPORT

### 106 TECH TALES

### 108 BUYER'S GUIDE



## MONITOR

NEWS | OPINION | DEVELOPMENT



## MIAMI VICE

Rockstar shares a first look at **GRAND THEFT AUTO VI**: but doesn't mention a PC version

**T**he last few months have been a bumper time for games, but the cherry on top was our first look at *Grand Theft Auto VI*. The next entry in Rockstar's crime-'em-up open-world series will arrive in 2025 and is a return to Vice City, aka the neon-soaked strips and flamingo-dotted marshlands of Florida. The first trailer's a scene-setter, heavy on vibes and low on detail, though what it does show suggests a lot of the earlier leaks were accurate.

It sure looks like *GTA VI*'s singleplayer side is built around two

protagonists, a Bonnie and Clyde-style setup with Lucia and her as-yet-unnamed compadre. The trailer's framing of the city emulates Instagram and TikTok-style social media posts, and in many cases directly references real-world viral videos. There's an abundance of nice cars, scantily clad women, glitter,

**THIS SEEMS TO BE  
HEWING CLOSER  
TO REALITY THAN  
EVER BEFORE**

grime, and bad behavior throughout. This is definitely *Grand Theft Auto*.

But there's a tonal shift: this seems to be hewing closer to reality than ever before, perhaps not surprising in a post-Trump America that seems to constantly parody itself. Twerking on the roof of a car for a TikTok video while driving really fast is a good encapsulation of this moment in American culture. *GTA VI* seems to handle an age where everything is content by doubling down on the chaos, with people in the trailer either having the hedonistic time of their lives or committing crimes. There's no chill here, and even the pool party has alligators.



CHIPLETS AHoy!

## GPU RUBIK'S CUBE



A recent patent from AMD shows that it's planning to tackle the problem of GPUs being huge and expensive, by making them entirely from dozens of tiny chiplets. Could this be the end for VRAM arguments and the start of a 'I've got more chips than you' battle? ■ NE

JADE ANNIVERSARY

## BEYOND GOOD AND EVIL?



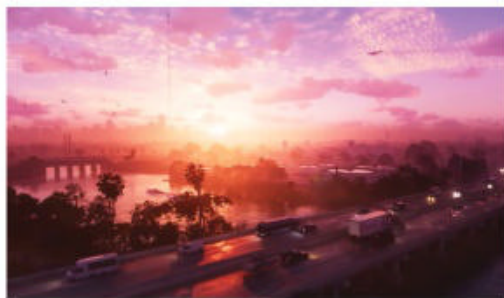
After 15 years of no *Beyond Good and Evil 2*, Ubisoft accidentally released a 20th anniversary remaster of the first game to Ubisoft+ subscribers this month. It then tried to scrub all evidence, but eventually gave up and announced more news to come in 2024. ■ JW

SILENT HILL: AI-SCENSION

## LET'S JAM



*Silent Hill: Ascension* is an episodic adventure with paid voting power, user "cameos", and a chat so unruly they had to shut it down. *Episode 3's* was the Jam Man (Forager), who was so weirdly written Genvid's CEO had to outright say his berry obsession wasn't AI-generated. ■ HR



**TOP:** The trailer leaked ahead of schedule, and Rockstar responded by posting the full thing early. Some Rockstar devs were clear about what they thought: "This fucking sucks".

**ABOVE:** Naughty Dog's Neil Druckmann, of *Last of Us* fame, called the trailer "jaw-dropping," adding that "for someone who grew up in Miami... this feels eerily familiar".

The bigger picture is in the wide shots of the city, showing both rural and suburban areas: lots of little islands, monster trucks in the mud, and intricate suburbia. And perhaps the biggest change is the density: these streets are jammed with NPCs and bustle, with numbers way beyond anything you'll see in *GTA V*, while out in the sticks it's positively teeming with wildlife. Another nice touch is the song used in the trailer, *Love is a Long Road* from the 1989 album *Full Moon Fever*, the first solo release from Floridian Tom Petty – which is straight-up telling us we're in for hard-bitten love story full of twists.

### PC OR NOT PC?

The bad news? There's no PC release date for *GTA VI*. *GTA VI* is almost definitely coming to PC eventually but, going by *GTA V*, we may have to wait some time after the console releases. Take-Two CEO Strauss Zelnick hinted at the increased importance of PC during the company's most recent earnings call, speaking effusively about the *GTA* modding scene and saying, "We want to be where the consumer is." Hopefully PC has taken on a new priority for Rockstar but, asked for comment on the status of a PC release, Rockstar told us all of the information currently available is in the statement. ■

Rich Stanton

## Highs & Lows



### HIGHS

#### Baldur's Great

A patch for *Baldur's Gate III* has added a playable epilogue.

#### Ghoulgins

Amazon's been showing off its *Fallout* TV series (due April 2024) and amazingly enough it looks great.

#### Cybermas

Surprise! *Cyberpunk 2077* said it was done after 2.0, but got a 2.1 update in December.

### DOA

*Call of Duty's Warzone 2* has been hived-off after a year: Activision says just play zombies mode.

#### Turing Up

A chatbot from the 1960s has thoroughly beaten OpenAI's fancypants GPT-3.5 in a Turing test.

#### Bungle

*Destiny 2's* \$15 pack of mid weapons and cosmetics led to a backlash.

### LOWS





# Special Report

PCG INVESTIGATES



Apogee and Nightdive put out a 'Ludicrous Edition' of *Rise of the Triad* just last year.

## SHARE AND TEAR

**APOGEE** shook up '90s PC gaming with disks in Ziploc bags

**I** remember hearing a story that there was a board meeting at Electronic Arts," Apogee founder Scott Miller says. "One of the top people slammed *Wolfenstein 3D* on the table and said, 'How are these guys beating us? How can some little company out of nowhere be making better games than us?'"

For an explanation, you need to return to the mid-1980s. Back then, Miller was coding videogames in his spare time at college and making them available for free. "I had written some text adventure games in the style of Infocom, released those into shareware and asked people to send me money," he says. "And it just was not working out at all. I wasn't making anything worth talking about."

What Miller was missing was an enticement—a way to lure players into payment, without giving away a whole product. In 1987 he put out a trilogy of fantasy roguelikes named *Kroz*: the first, a 25-level game, was released for free, but the second and third parts cost \$15 each. "That was the magic trick that worked," he says. "No one else was doing that. I immediately wrote another three *Kroz* games and did the same thing with those."

By the end of the decade, Miller was making \$100,000 a year through checks showing up in his mailbox. He quit his day job and began reaching out to other game authors

through pre-internet services like BBSes and CompuServe. One was Todd Replogle, an "amazing, amazing talent" who dreamed up *Duke Nukem* with Miller and worked as a programmer on the series from its origin as a platformer through to its final, 3D form. Another was John Romero. At the time, Romero and the team that would become id Software were pumping out a new game every month for Softdisk, a company that promised subscribers 12 original games over the course of a year for a total of \$89.95.

John Carmack had blown Miller away with his demo of a smooth-scrolling platformer on the PC—a feat akin to distilling *Super Mario* in his garage. But the nascent id Software wasn't convinced of the merits of shareware. "If you want us to make a game for you," they told Miller, "you gotta pay us \$2,000 to do it." Miller practically punched the air, knowing he would have gladly paid ten times that amount to publish id's first game.

### KEEN DREAMS

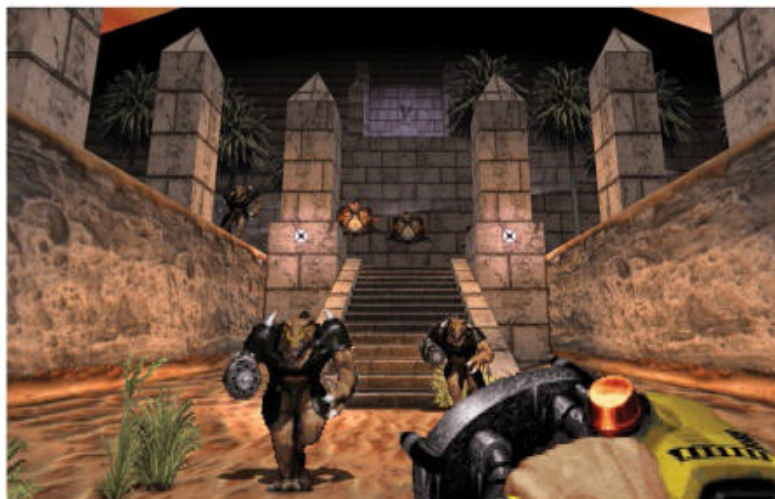
In December of 1990, Miller uploaded *Commander Keen's* first episode to bulletin board systems that served as file sharing hosts. For \$30, players could order the two follow-up episodes on floppy disks in Ziploc bags. And they did. In droves. By the end of the month, Miller had sent Romero and co \$10,000 in royalties.



### Gratis gaming

Shareware began in the early '80s with entrepreneur programmers like Andrew Fluegelman, who mailed out copies of his communications program PC-Talk for free and encouraged users to make copies. If they so chose, fans could also send Fluegelman \$25. He characterized this model as "an experiment in economics more than altruism", and sure enough, it soon started making people rich.





**LEFT:** The Duke was intended to satirize over-the-top Hollywood action heroes.

## NEXT EPISODE *Meet the shareware greats that won over millions and defined the '90s*



### WOLFENSTEIN 3D

BJ Blazkowicz lights up Nazis all over the castle, while taking care to press against every wall in case of secret doors.



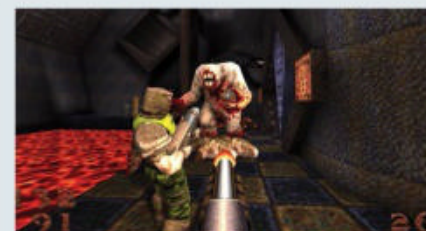
### HERETIC

A spinoff from *Doom* featuring a fantasy setting, *Heretic* helped introduce inventory management to the FPS.



### DUKE NUKEM 3D

The Duke himself may be considered a painful hangover today, but his hit game pioneered destructibility in levels.



### QUAKE

Each of *Quake*'s episodes has a distinct personality, since they were mostly helmed by different designers.

The next check, in January, was for \$25,000. "It just grew from there," Miller says. "At that point, they were completely sold on the whole idea of shareware." The US postal service, too, was completely fascinated by this new mail phenomenon—taken to a new level by the launch of *Wolfenstein 3D*. "They actually sent an empty truck to our office, just to load up all the packages and everything we were sending out," Miller says. "We got really close to them, and also developed a really good relationship with our local printer for all the labels and everything. Early on, Apogee developed more as an order-taking company."

Only in the months after *Wolfenstein 3D*, as id Software's star continued to rise, did Apogee move into internal development. While the company was still working with several shareware creators, Miller knew that Romero and Carmack would want to break off on their own, and so asked former id Software designer Tom Hall to lead work on *Rise of the Triad*, a new Apogee FPS that would keep the company's mail order staff and infrastructure busy.

"It actually started off as a *Wolfenstein* sequel," Miller says. "But about ten months into development we got a call from John Romero, who said, 'You know, we really don't want another *Wolfenstein* game coming out. We'll let you continue to use the engine, but you can't call it *Wolfenstein* any more.' Their worry was that it was going to be released too close to their coming game, *Doom*, and they didn't want the competition."

## SHAREWHERE?

*Doom* ended up sweeping away any and all competition. Shareware players bought 1,154,541 copies, placing it among the best-selling games of the '90s. In the process, *Doom* brought shareware to the attention of an enormous audience, and inextricably associated the model with the budding FPS genre.

Miller reckoned that Apogee's shooters were in some cases reaching tens of millions of people, "My estimate was that about one or two in every hundred people that would download a game would end up sending us money for it," he says. "Nowadays, ordering on Steam is just pressing a button. Back then you had to pick up the phone and have your credit card ready or write a check. There was a lot more friction."

In the end, it was the internet brought down shareware. Over time it became possible, and then trivial, to download full games online, making mail order the preserve of lavish collector's editions. But the spirit of shareware still lives today in Steam demos, Miller believes. "It's a way to have the public help you playtest, get great feedback from them and modify your game as necessary," Miller says. "At most you want to give away about 25 to 30% as your demo, which is what we did back in the shareware days."

It's a model the modern-day Apogee will be following for all its upcoming releases, whether or not the mail truck shows up. ■

**Jeremy Peel**

**BY THE END OF THE  
DECADE, MILLER  
WAS MAKING  
\$100,000 A YEAR**



# Secret Level

THE UNSUNG HEROES OF DEVELOPMENT

## CLOTHES CALL

Larian Studios' art director **ALENA DUBROVINA** on designing armor and clothing for games

**A**lthough recently promoted to art director at Larian, Alena Dubrovina hadn't originally planned a career in games. After a false start studying journalism, she started over with a game-focused art education, including a required internship. She interned at Larian, stayed on as a junior artist, and moved on from there.

"What attracted me to games," says Dubrovina, "was the amount of variety that you could contribute to. A game is not only focusing on architecture, or fashion, or anatomy—right? It's all of those things combined."

Dubrovina was a lead character artist during *Baldur's Gate III*'s development, the responsibilities of which included clothing and armor design. These designs were very much a collaborative process however, involving multiple people including writers, concept artists and more.

The design team has changed and grown significantly since *Divinity: Original Sin II* went into production, too. "Back in the day we were a team of maybe four character artists," says Dubrovina, "[and] we grew it ever since". The six-year production time of *Baldur's Gate III* meant that "we were figuring out what to do along the way", with the quality of armor and costume designs improving noticeably over the years.

*Baldur's Gate III* presented a challenge *Divinity: Original Sin II* didn't have, in terms of the adjustable cinematic camera. Patterns and clothing designs now needed to work from both close-up and far away.

Dubrovina gives an example of three patterns which, while distinct up close, looked the same at distance.

The D&D 'bibles' available to the team determined which types of armor could be used, and by which classes. The practicalities of game development provided further restrictions to work within. The wildest and most flamboyant armor or clothing designs at the concept stage sometimes had to be cut, as tech animators would point out that they were not practical for animated characters within a game world.

### MY CHERIE ARMOR

That doesn't mean that there was no creativity or fun; far from it.

"Sometimes we came up with something that we hadn't done before," explains Dubrovina, "and then we'll make a small test; and if everybody is happy with how it looks, we go for it." Circling back to the D&D authenticity, one example of this having a significant impact on design is the barbarian class, and how characters within it are supposed to be naturally tough.

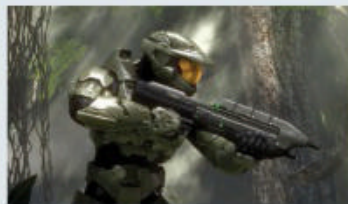
"Their outfit is technically not considered to be protective. That was a huge challenge for people who never designed such an armor! In the briefing, it says 'armor', it's an equipment piece. So you keep wanting to add shoulder pads. You keep wanting to add some kind of protective belt, or a chest plate. And whenever we got the sketches we were like, no, no, it shouldn't be an armor, this is too protective! We needed to follow the design behind it."

When she first started working on *Baldur's Gate III*, Dubrovina would point out that some armor designs weren't practical, or were somehow unrealistic. Eventually, "I realized that wasn't the goal. The main thing is looking cool, and fitting in the game setting, and telling the story that it needs to tell. And what I noticed as well—no complaints from the online community!" When designing outfits and armor, Dubrovina believes real-world trends matter. "I think it's very important for game professionals not to isolate themselves from it. It's really easy to get stuck in this bubble and to just be the guy who works in a very specific style. Partially, I think what made *Baldur's Gate III* such a successful game, is that we made it as varied as possible." ■

**Luke Kemp**

### FITTING IN

#### Four iconic gaming outfits



#### MASTER CHIEF

At a brief glance fairly standard space armor, *Halo*'s hero is recognizable in nanoseconds.



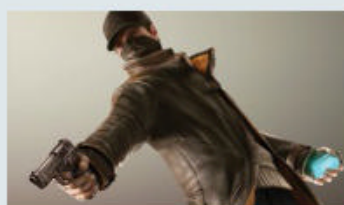
#### SONIC

White gloves and red shoes is a complete outfit, as Sonic is often heard telling the arresting officer.



#### AGENT 47

When you're out for a bit of contract killing, you want to dress as sharp as a well-loved knife.



#### AIDEN PEARCE

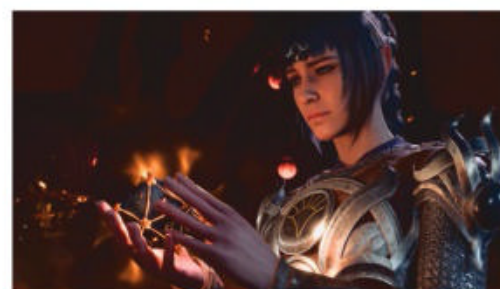
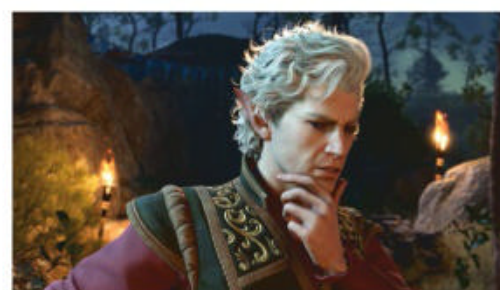
Wearing a long coat in summer is a great way to blend in, and who can forget the Iconic Hat?



“BACK IN THE DAY WE WERE A TEAM OF MAYBE FOUR CHARACTER ARTISTS”



Boo, hiss, and so on! Nice threads though, good job all.



**ABOVE:** Some people are keen to get Lae'zel's armor off as quickly as possible.

**LEFT:** Would so many people simp for Astarion if he didn't have such magnificent fashion sense?









## NEED TO KNOW

RELEASE  
TBADEVELOPER  
Build a Rocket BoyPUBLISHER  
Build a Rocket BoyLINK  
[everywhere.game](http://everywhere.game)

## EVERYWHERE

A sandbox in which players can become game designers

**O**ne thing will always remain true about players: give them a sandbox and a set of tools, and they'll make just about anything, everywhere. That's what *Everywhere* sets out to do. I visited Build a Rocket Boy, and watched a proof-of-concept presentation. I also spoke with Adam Whiting, the studio's assistant game director.

*Everywhere* is a game with one of those pie-in-the-sky pitches. It's my job to meet every would-be landscape-changing game with a healthy dose of skepticism—promises are one thing, but it's another to make those promises play out. It's also my job to tell you that, after seeing the dang thing, I think Build a Rocket Boy has a real chance of pulling it off.

OK, first things first: *Everywhere* is way more than a third-person action game, but those are its basic bones. You have multiplayer matchmaking, unlockable outfits, driving, that sort of thing. The real rocket fuel here lies in its user-generated content (UGC). *Everywhere* has a level editor called Arcadia—but even calling it a level editor seems like shorthand.

"You have to bear with us a little bit," says Whiting as he leads the initial presentation. "This is a build that's literally from last week." Bit by bit, I'm introduced to Utopia city: a central hub with in-game shops, museums and a cinema. It's like a capital city in an MMO, with buildings for run-and-gun matchmaking as well as races. It's also surrounded by a few

## FIRST LOOK

biomes players can go out and explore, providing some open-world gameplay with portals to pre-built levels and ruins to explore. When I ask whether or not they plan to put user-generated content (UGC) into said wilderness, Whiting responds, "We would love to do that, yes."

That gets my attention, but I'm still holding my breath. Utopia's pretty, but it's also family-friendly and scrubbed clean of the player-made messiness I'm here for. It's an inoffensive place to spend your time. But for a UGC-focused game, I want to see how players can get freaky with it.

It's fortunately not too long before we're shown that level editor, Arcadia. The moment I see a big, flat grid where you can start out with a gray cube, I'm sold.

## SMUSHED TOGETHER

You can scale objects to your liking and smush them together. You can add custom AI for enemies, pre-bake your own lighting sources, and even tweak when, how, and where audio files play. One dev confidently straps together a functional sliding door with what he calls nodes—code building blocks that are invisible during play. I'm later shown a series of swinging ax traps with so many nodes attached it looks like a digital spiderweb. This is what I'm here for.

*Everywhere* has a thin, clinical, *Fortnite*-esque outer shell, but the potential of its building tools buzz with messy, organic, player-focused potential. The only thing Arcadia's missing when compared to something like PS4's *Dreams* is model sculpting.

The potential is absurd. Those code nodes I mentioned can be attached to anything. Several bosses created by the dev team are straight-up hunks of geometry brought to life by wizardry.

That clean, sanitized hub very quickly became recontextualized as a safe gateway to how absurd *Everywhere* could get. The game has an Alice and Wonderland structure, as Whiting describes—a normal world full of holes you stumble into, tumbling into the deep ocean of UGC content before returning to Utopia to catch your breath. Or you could just go and play chess or something. World's your oyster. What excites me the most, however, is how much *Everywhere* wants you to share.

## I'M INTRODUCED TO UTOPIA CITY: A CENTRAL HUB WITH IN-GAME SHOPS



## STAMPING THINGS OUT

Any level (or Arcs, as the game calls them) can be shared with other players, which is a given. You can even plonk down portals to your arcs in other arcs, inception-style. Say you're a prolific level designer. You could make a hub world that serves as a browser to your other projects. Or you could chain the suckers together and make a whole game.

What really gets me excited though is the stamps system. Whenever you're in the editor, you can grab a clump of entities and turn them into a stamp. That stamp can be gifted to other players or sold to them for in-game currency. It's not just limited to geometry, either.

A stamp could be a tower, a dungeon, a boss enemy, a checkpoint—or even bits of code. Lighting sources, enemy AI, rules for a multiplayer game mode, whatever your mod-adjacent heart desires.

While this has boggling implications for the inventive wunderkinds out there, it's also great news for people who just want to kitbash stuff together. After the presentation, I sat down with Whiting to talk about the system in greater detail.

"You don't need to be an expert in building. You can experiment with [stamps] as you like. But you can also buy more sophisticated things that other players have built ... or [you can] deconstruct them, try to figure out how those effects were achieved, and then try to recreate them yourself."

## PLAYERS AS A FOCUS

What gives me the most hope for *Everywhere*, though, is how player-focused the devs seem to be. They have an in-house team messing with the editor, sure, but they also admit that they have no idea what people are gonna make. Because of that, Build a Rocket Boy will be making adjustments as it goes.

While the studio does have a post-release roadmap in mind, it'll be also changing stuff around based on what players need. "We'll be really curious to look at things [players] have built, and how they've built it, and then go, 'OK, well maybe we can change tool X to do this function that'll make that so much easier. Clearly they spent 100 hours doing this,

let's make it so they can do it in an hour,'" Whiting explains.

Whiting fully expects player-designer celebrities to emerge, and says he'd love to have those individuals work directly with the devs, too. "We will be aiming to make people famous on the platform," he says, floating the idea of *Everywhere* being a route to getting a job in the industry."

They're big dreams, but Whiting does genuinely see *Everywhere* as something that could give someone a job one day, "I remember growing up in Nottingham, and it felt like the games industry was something I'd never get to join ... I wanna lower the ladder down so that other people can come in, so that everyone who has a great idea has an opportunity to share that creativity to the world."

That philosophy also applies to the game's player-driven economy. Whiting describes a system where, for every player that uses a stamp you've created, you'll be able to get a cut of the action yourself. He uses a door as an example: "You could then give that stamp to that person ... then they could sell [a house with that door in it]. Our systems would detect that your door was a part of [it]. Therefore, you're entitled to a small amount of every transaction."

Build a Rocket Boy would like to allow its players to sell their goods for premium currency too, but that'll be a while away from launch. Which is fair. This is a massive system, and while I've been taken by what I've seen so far, I can think of a hundred ways in which it could cause some kind of digital drama. Which leads me nicely into the feeling I took away from my trip.

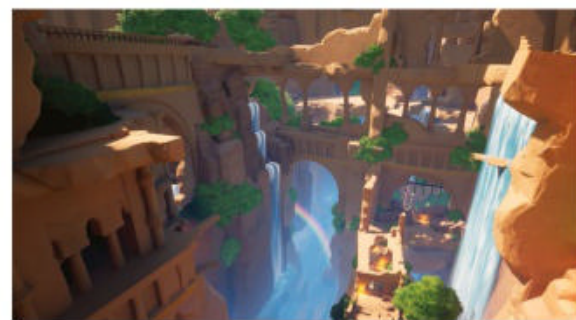
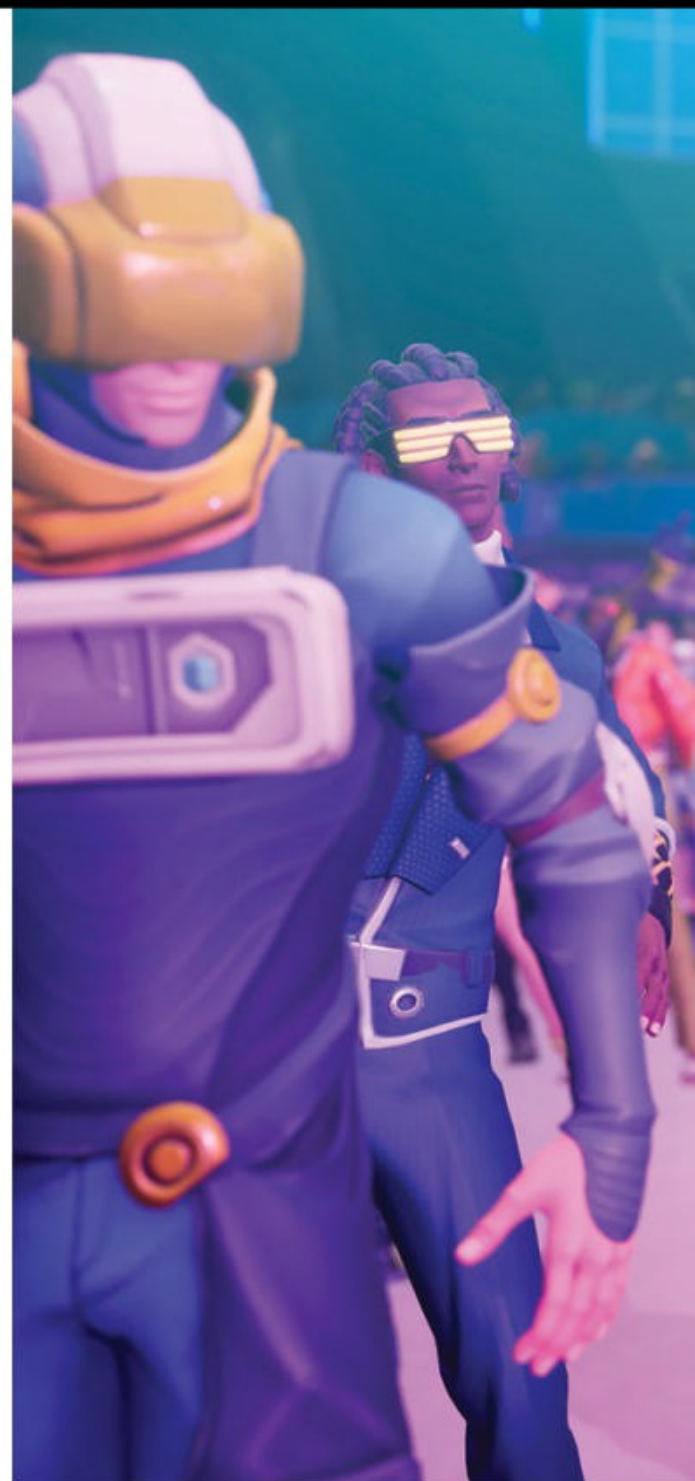
## 'IF' IS THE WORD

The question is, "Can they pull it off?" Having gone to the studio, having seen the game and its builder in action, having seen its developers' attitude towards player-driven design... yeah, I think they're in with a real chance. Nobody can say for certain what the next big thing is, and I'm not here to tell the future. But there's a raw spark of potential here that's really exciting.

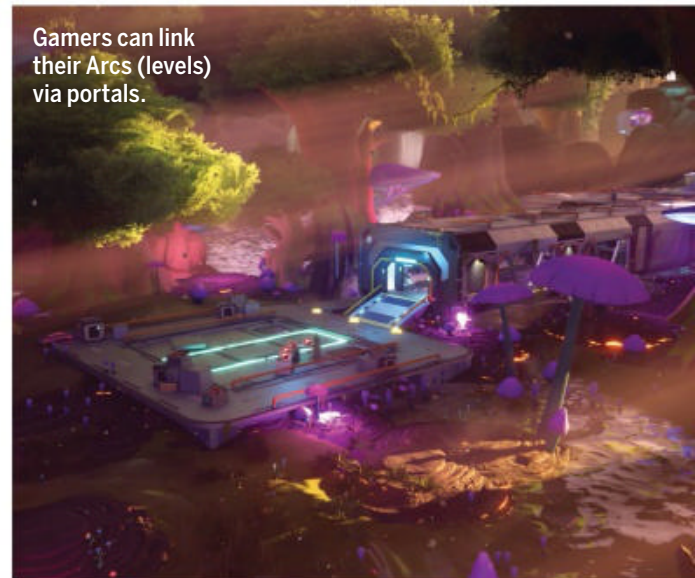
But if it breaks the atmosphere, I feel like we'll be talking about *Everywhere* like we talk about *Fortnite* or *Roblox*. It's ready to hit a niche that hasn't been really filled on our platform yet. All it needs to do is stay on-target.

Also, if it does take off, someone will fully code an *Elden Ring* boss within the first year. You can hold me to that.

Harvey Randall



Gamers can link their Arcs (levels) via portals.



# WHAT GIVES ME THE MOST HOPE IS HOW PLAYER-FOCUSED THE DEVS SEEM TO BE





**ABOVE:** That sure is an eclectic set of outfits.

**LEFT:** Creating your own virtual spaces—and the fun you have in them—is key.





NEED TO KNOW

RELEASE Q4 2023	DEVELOPER Nimbus Games	PUBLISHER SCRYsoft	LINK <a href="https://nimbusgames.dev">nimbusgames.dev</a>
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CHIYO

What’s a creepy mansion without a locked door or 20?

When it comes to horror, less is often more. Something moving in the dark. A moan from the shadows. But in *Chiyo*, less just seems to be... well, less. The biggest challenge I faced in my time with this ghostly mystery was trying to find dead people to see, scary or otherwise.

Don’t get me wrong: I love the tension of a drawn-out spooky tease. I want to see an ominous silhouette at the end of a corridor, or a brief flash of something terrifying when I open a door covered in blood. But I do want to see something.

Yet *Chiyo*’s opening chapters were surprisingly light on the whole ‘haunted by the souls of the damned’ business, even when I tried to poke and prod the game into (un)deadly action. Oh no, what if my ghostbusting mystic happened to walk straight through this noise-making trap instead of crouching under it? Nothing. How about I make them pick up a mysterious item, or fiddle with something that’s probably cursed? Again, nothing. It was always nothing. I wanted to worry that the game’s supernaturally charged notice-o-vision would reveal a malevolent spirit was secretly breathing down my neck, or that investigating a decaying room might anger some violent fiend, but all I could find was one disappearing spirit and an invisible ghost rattling a door.

That door was locked by a wooden bar on the other side, and as this is a puzzle

FIRST LOOK

ALL ABOUT SNOOPING AROUND AND USING MY BRAIN TO SOLVE STRANGE PUZZLES

game I assumed it was something I had to leave alone until I found another way around and then move the bar myself, creating a handy shortcut through the game’s haunted mansion. What actually happened was the door suddenly and silently unlocked itself after the ghost seemed to get bored and go away, about a minute after it had been wordlessly giving it a good shake.

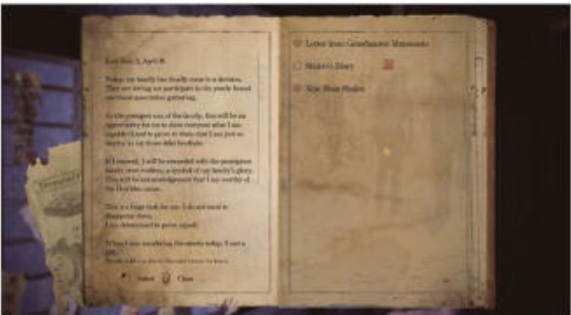
RIP PUZZLES

And that was the moment my interest in solving the game’s puzzles vanished as quickly as a sunbathing vampire and never came back. The game’s all about snooping around and using my brain to solve strange puzzles: that’s not just all I’m personally here for, that’s pretty much the only thing my character can do. So for that effort to mean anything I need to know the game’s playing by a consistent set of rules, and *Chiyo*’s maze of doors doesn’t. I can never be sure if I need to come up with a clever solution to a problem, or if I’m completely wasting my time even trying and just need to work out how to trigger whatever

semi-related spook will make the game open something up for me. The game’s atmospheric old-timey Japan setting actually makes this worse. A lot of the text I encountered in the mansion was written only in Japanese, with no explanatory translation appearing when I examined my kanji-laden surroundings. Of course it’d be ridiculous to pretend some ancient ceremonial object had English text carved into it all along, but it creates another sense of foggy uncertainty that, again, has nothing to do with my personal puzzle-solving skills. Am I supposed to understand this text on sight and use what it says to help me solve another problem? Should I perhaps try to find a scrap of paper lying around that helpfully explains it instead? Or is this just decorative flavor I can safely ignore? In *Chiyo*, the answer to all three of those questions is an unhelpful ‘yes’.

There’s definitely a ghost of a good game in here: after all, who doesn’t want to roam around a bloodstained mansion on a dark, rainy night? But it remains to be seen if *Chiyo* can bring it to life.

Kerry Brunskill



These red butterflies mean ‘there’s something important here, stupid’.





**ABOVE:** Pouring rain helps to set the mood.

**LEFT:** Some objects must be manipulated with the mouse.





## NEED TO KNOW

RELEASE  
23 OctDEVELOPER  
ZeekerssPUBLISHER  
ZeekerssLINK  
[shorturl.at/AKY26](https://shorturl.at/AKY26)

## LETHAL COMPANY

A horror comedy that plays like a more chaotic Phasmophobia

“**L**et’s split up, cover more ground,” says one spaceman to another. “Yeah, that always works out in Scooby Doo.” They turn off in opposite directions at the dark concrete intersection. From the left, voice raised to be audible over the hissing steam pipes, the Scooby-savvy one speaks. “Got some metal scrap. You?” “Nothing. No, wait, I’ve found...”

Something beeps. “...oh.” A bright flash. A plume of flame. Chunks of meat launched down the hall. Silence for a moment. “Landmines, then,” the survivor notes, before dutifully picking up their exploded teammate’s possessions without missing a beat.

## HORROR COMEDY

*Lethal Company*—recently released into Early Access and already clocking in among Steam’s ten most played games—understands that horror and comedy are very closely related. Both bank on building tension and anticipation, followed by an unexpected release of energy. Whether it’s a sudden scream-inducing scare or rib-straining laughter depends entirely on whether you’re the punchline or not.

Vaguely similar to *Phasmophobia* but more immediately chaotic and deadly, *Lethal Company* is a first-person co-op horror game where up to four players are expendable interns sent in to scavenge anything left of value after some horrible space disaster swept through a series of lunar facilities now populated by wobbly,

low-poly monsters that would look funny if they weren’t so good at pouncing at the exact best/worst moment.

You’ve three days (each day an 11-minute real-time scramble) to scavenge everything you can from inside dark, infested industrial facilities, return to the company HQ, sell what you’ve found and pray that it’s enough to hit your quota so you can buy more gear and do it again, but harder. You start with barely enough to buy flashlights for your team. A total team wipe will lose you everything you’ve hoarded on board. It would be incredibly stressful if it wasn’t so damn funny.

*Lethal Company*’s lone developer, Zeekerss, clearly understands comic/horrific timing. His previous game, *The Upturned*, was singleplayer but imbued its set pieces and monsters with fantastic comic timing. Tension is built and released with clockwork precision, whether it be with jumps or jokes; often both simultaneously. *Lethal Company*, despite being a game of procedurally generated mazes populated by AI-driven horrors lurking in the shadows, captures that same energy almost perfectly.

PLAYED IT

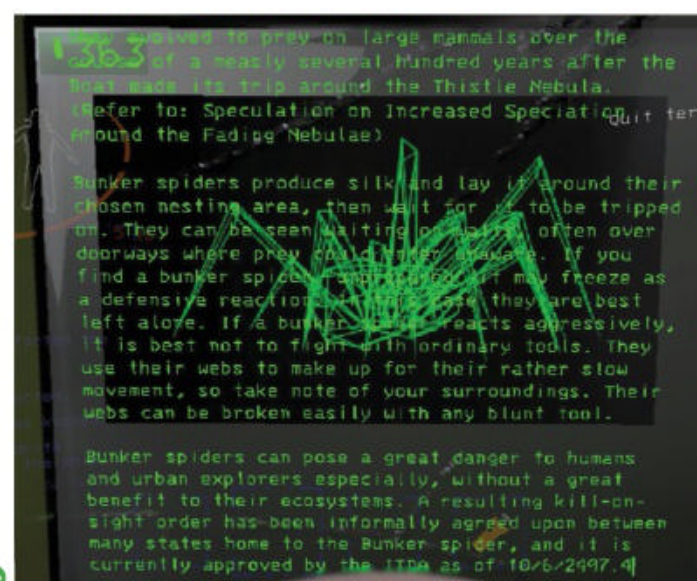
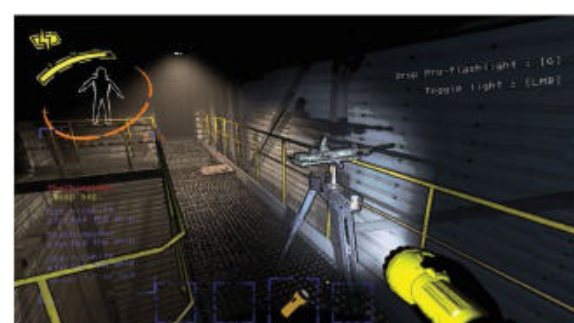
## HERE BE DRAGONS

A player will hop across a deadly chasm ahead of the team, turn around and celebrate with a jaunty little dance just before being snatched away silently by something vaguely humanoid with glowing white eyes as the rest of the squad watches on helplessly.

“I think there might be spiders here,” one player says across the always-on proximity voice chat, pointing towards some cobwebs. Exactly one second later, an arachnid the size of a small car drops from the ceiling on top of them.

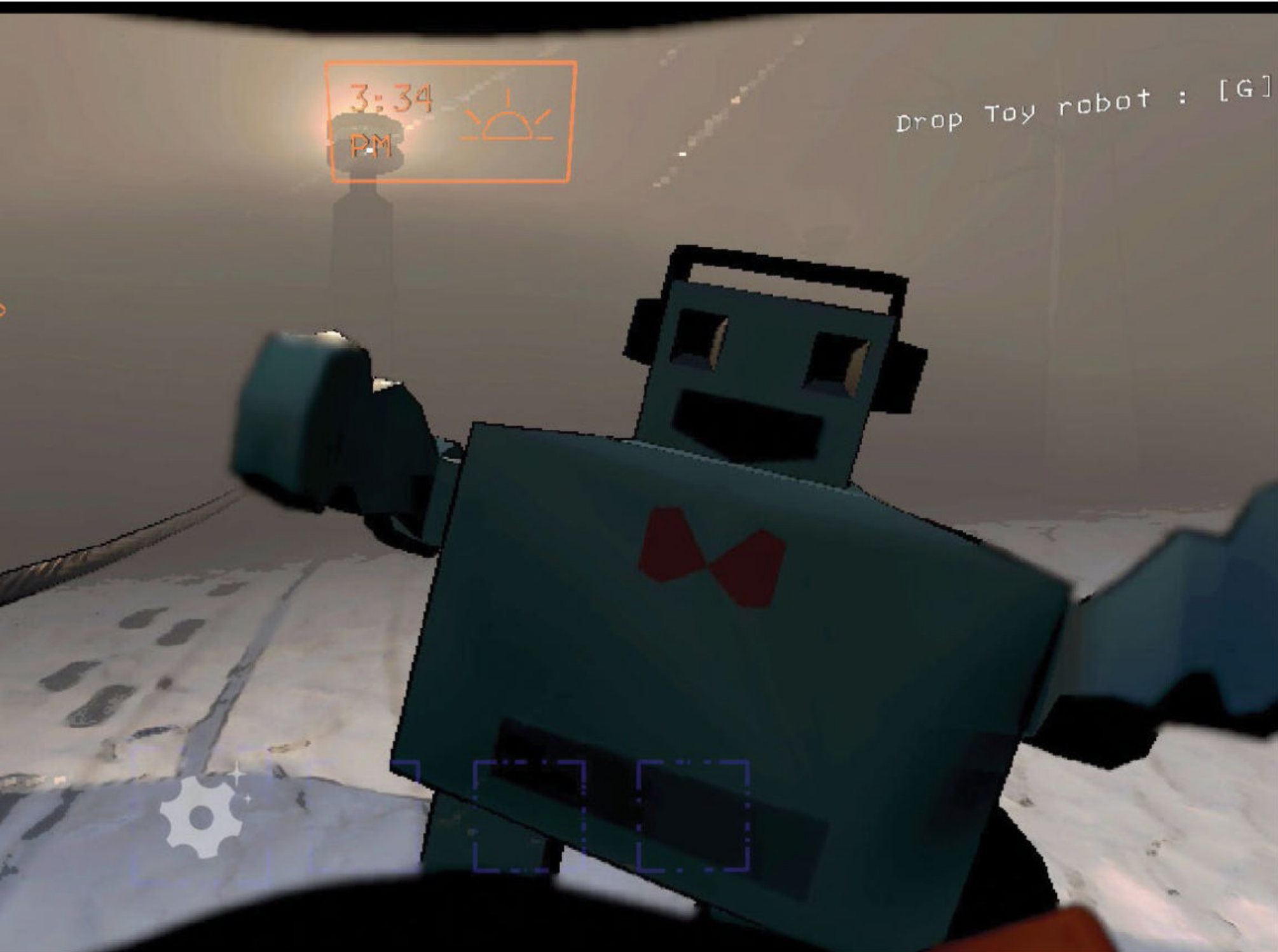
“Look, this time it’ll be different,” says another player, confidently, as they hop out of the ship, their voice trailing off with distance. They are immediately obliterated by a random lightning strike, their corpse ragdolling into the stratosphere. This is the second time they’ve been killed by lightning in ten minutes. The rest of the crew are doubled over laughing.

Four crewmates return from a scavenging run. Somehow, they’ve found nothing but clown horns. On the way back to the ship they are confronted by a



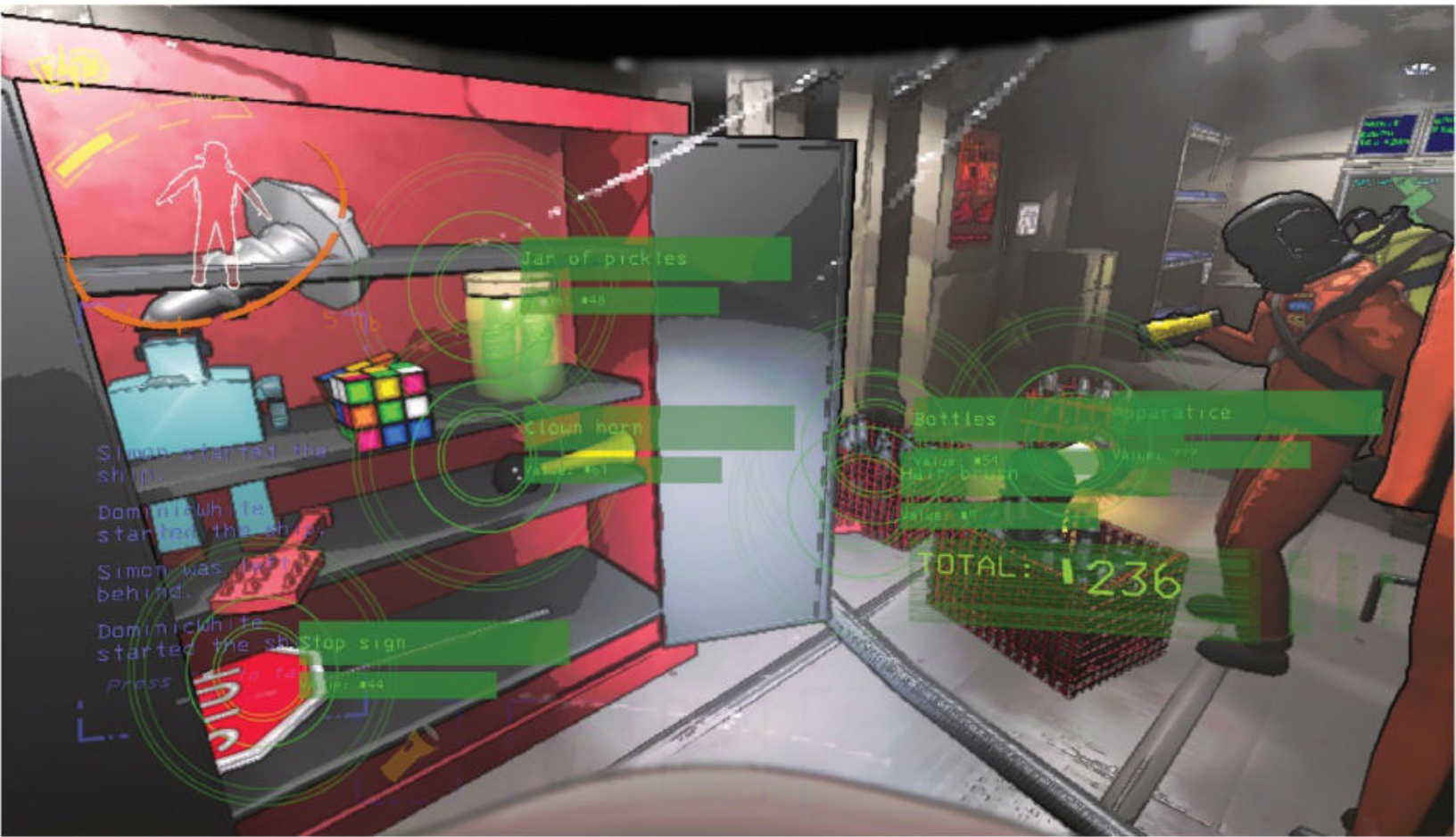
## AN ARACHNID THE SIZE OF A SMALL CAR DROPS FROM THE CEILING ON TOP OF THEM





**ABOVE:** Well doesn't this robot look like a happy chappy.

**LEFT:** A jar of pickles, a stop sign, a clown horn and a Rubik's Cube. Whose cupboard is this?





**RIGHT:** Only one player needs to survive to bag any hoarded loot.

**BELOW:** Just because you're being worked to death doesn't mean you can't enjoy the splendid view.







Graphics in *Lethal Company* are purposely lo-fi.



» towering alien giant, rising out of the misty treeline. It turns to face them. They all reflexively honk at it in perfect unison before performing an about-face so precise it feels like a rehearsed military drill, then run off screaming.

This is a lo-fi game. Even without the heavy resolution downscaling and bitcrushing happening (and no, you can't turn either off), this would be a simple, almost minimalist-looking game, cheaply made by one person. I do not believe it is advanced enough to listen into its players and prank them time and time again with intentional timing. It just somehow does it with such regularity that just mentioning a disaster scenario feels like speaking it into existence.

*Lethal Company* is many things—funny, scary, unpredictable and replayable—but it isn't pretty, and most of that feels intentional. As noted above, this is almost N64-esque in aesthetic, to the point of players often squinting into the shadows, unsure if that shape in the distance is a valuable item or a lurking monster. This is a world of harsh polygon angles, wobbly monsters and even wobblier ragdolls when crew bodies inevitably go limp. Resolution is intentionally kept very low and there's little support for higher-end PC features. This does mean that everyone gets the same smooth experience whether they're running on an absurdly overpowered gaming rig or an ancient laptop; Everyone is equally doomed in space.

### UNFAVORABLE ODDS

Dying would be frustrating if the game ever made you feel like winning was a possibility, but the odds in *Lethal Company* begin so stacked against the players that it feels like a huge relief just to survive to sell a second round of garbage. Every player I've encountered seems to accept their spectacular demise as a matter of 'when', not 'if'. With the inevitable expected, it frees up a lot of mental energy to just live in those moments between disasters and scramble between near-death experiences as best you can, and the inherent humour prevents players from becoming numbed or tired by unrelenting

horror and tension, as other games can. With enough time and coordination, a crew can become experienced. You can accrue enough money for better equipment and ship upgrades. Walkie-talkies allow the team to split up, but only speak if they've got a free hand to hold the device, but many heavy bits of salvage require both to carry.

### PRESSURE COOKER

The better you do, the more runs you survive, the higher the tension becomes. You've got so much further to fall, and the game likes to save its weirdest creatures and hazards for these more confident, enduring crews. So long as even one player manages to take off in the ship, the hoarded loot is preserved, making players scramble to play the role of Final Girl even at the expense of their crewmates, leading to even more hilarious misadventure.

As crews learn to communicate, one player can opt to stay behind on the ship, using its scanners to track the team and any unidentified movement near them and coordinate via radio. They just can't always tell if someone on the screen is running from a monster, or already dead and being dragged off to its lair. Did they get devoured mid-sentence, or just pick up something heavy? The game feels precision engineered to create these cinematic moments of suspense, with only the dead players lurking silently in spectator mode knowing the full truth, unable to speak until the round ends.

Zeekerss has announced plans to keep expanding and refining *Lethal Company* for around six months before it leaves Early Access with the stated aim of making it infinitely replayable. I cannot wait to see what new horrors, features and potential disaster scenarios are in development, and while I'd love to see more environmental variety (especially in terms of building interiors), I reckon *Lethal Company* is easily worth ten quid already, especially if you can provide three friends with microphones to join you.

However, even if you don't already have some friends to call on to face the game's horrors and slapstick moments, considering that at the time of writing *Lethal Company* has over 78,000 Overwhelmingly Positive reviews on Steam, finding fellow boiler-suit clad workers to get into misadventures with sounds like it is going to be very easy indeed. A scavenge-'em-up to definitely keep your eye on in 2024.

*Dominic Tarason*

## A WORLD OF HARSH POLYGON ANGLES, WOBBLY MONSTERS AND WOBBLIER RAGDOLLS





**ABOVE:** Leave an icy trail to send skeletons skating.

**RIGHT:** Summer, Goddess of Fire. One of the more straightforward of the deities.





## NEED TO KNOW

## RELEASE

Nov 14, 2023 (Early Access)

## DEVELOPER

Realm Archive

## PUBLISHER

In-house

## LINK

realmarchive.com

## DEATH MUST DIE

That is not dead which  
can eternal respawn

**W**hat if *Vampire Survivors*, but *Hades*, with a title that recalls Lovecraft? That's quite a pitch, and Realm Archive, a 'group of friends making games' has begun to deliver, releasing into Early Access version 0.6 of a game that reflects a lot of what was great about its influences.

To begin, you're attacked by skeletons. The bony brigade totters at you from all directions, occasionally uttering things like "destroy". It's best not to ask how they manage to do this, being only bones, but desiccated death doesn't seem to have affected their sword-swinging abilities either.

It's kill or be killed. They come at you in droves, swarms, sometimes singly, but you have a weapon to knock them back. Luckily there's an auto-attack button, and a slider in the options to set how powerful you are, effectively a difficulty slider. You can play the game like a twin-stick shooter, moving with the left stick and directing your attacks with the right, or you can automate attacks, sending them in the direction of the nearest bad guy.

Soon you'll increase in power, picking up new weapons from the ground, activating shrines, pleasing deities and otherwise leveling up to unlock new powers and spells.

Your character has a dash move, which begins the game as a useful way to avoid incoming projectiles but can be modified to deal damage itself, or leave a

trail of fire or frost behind you. After the skeletons, stone enemies like angrier versions of Super Mario's Thwomps come out of the woods, taking more hits to kill and mixing up the rhythm of attacks. Later, walls trap the protagonist in while slimes attack from all around, a power-up that causes chains to spin around him, plus the auto-attack button, proving the key to escape. An upgrade that sends large blades or sickles spinning around the screen soon becomes a favorite, but attacks at the beginning of the game are slow, and it can feel sluggish.

Larger boss characters occasionally assault you, telegraphing their hits with red cutouts you need to avoid or get hurt. All the while a timer ticks at the top of the screen, making it very clear that this is a game you'll be expected to play many times, increasing your knowledge and skill to survive longer, pick up more upgrades, and eventually meet the grimmest reaper of them all.

## DEAD FAMOUS

The story here is that you're trying to kill Death, who's committed unspecified crimes, at the behest of Krom, God of Conquest. There's probably a good reason why the other gods have chosen to send you up against Death.

You have Time's hourglass, which keeps you coming back to life, and are aided by the other gods you meet on the way, such as Summer, God of Fire, who powers you up with flaming attacks and spells that see meteorites crash to earth around you.

Die, and you're returned to a mountaintop fortress, the gate to the underworld to which you have laboriously climbed, with your items intact. Here, you can enter the waters to make another run, but it's otherwise empty as the game begins, its alcoves waiting to be filled up with item shops and more.

The game has all the hallmarks of a classic Early Access title—typos included. As it stands, *Death Must Die* features three playable characters, six gods to bless you, seven enemy types to batter and about six hours of content. The devs expect it to be in Early Access for about a year, so we'll be looking at a greatly expanded game when 2025 rolls around.

*Ian Evenden*

PLAYED  
IT

SOON YOU'LL INCREASE IN  
POWER, PICKING UP NEW  
WEAPONS FROM THE GROUND

You climbed up  
first, but others  
will follow.





## NEED TO KNOW

RELEASE  
TBADEVELOPER  
Spearhead GamesPUBLISHER  
Spearhead GamesLINK  
witchstone.caUNFORETOLD:  
WITCHSTONEA CRPG that captures  
the flexibility of D&D

**A**fter making my adventurer in *Unforetold: Witchstone* (a roguish elf with a penchant for magic) and finishing up a tutorial fight at sea, the first thing that I did—standing on the docks, probably looking a bit damp—was intimidate the first random NPC I encountered, forcing them to join my party. I then proceeded to do the same thing to every other nearby NPC until my roster was full. Who needs charm when you can just be an asshole?

These NPCs were not among the fleshed-out characters that Spearhead Games has designed to be your allies in this sandbox RPG, but you can recruit them all the same. Everyone in the game can be influenced in myriad ways, as long as the dice rolls your way and your stats are up to the task. Thus, I began my adventure accompanied by a raggedy band of rightly miserable refugees who absolutely did not want to be traipsing after some random dude they just met.

Making NPCs my minions is only the tip of the iceberg when it comes to the Influence system, as Spearhead's co-founder and creative director Malik Boukhira explains: "So you start by determining something you want from that character, whether it's just following you around, meet you somewhere, attack someone, give you something they have in their inventory or joining you as a companion even if you want—and then you pick an approach. How do you go about that? You can go

sweet talk them, be charming about it, you can threaten them, you can blackmail them, you can argue with them logically, if you're a smart character. If you're a cleric, maybe you can convince them it's the right religious thing to do.

"Depending on that character and that order, that approach might be more or less difficult. For example, a brave and courageous warrior might not respond very well to physical threats. But maybe they're gullible a bit and maybe you can sweet talk them into doing certain things. Ordering a faction guard to attack their colleague maybe won't go so well, but if you find someone they dislike, it might be easier."

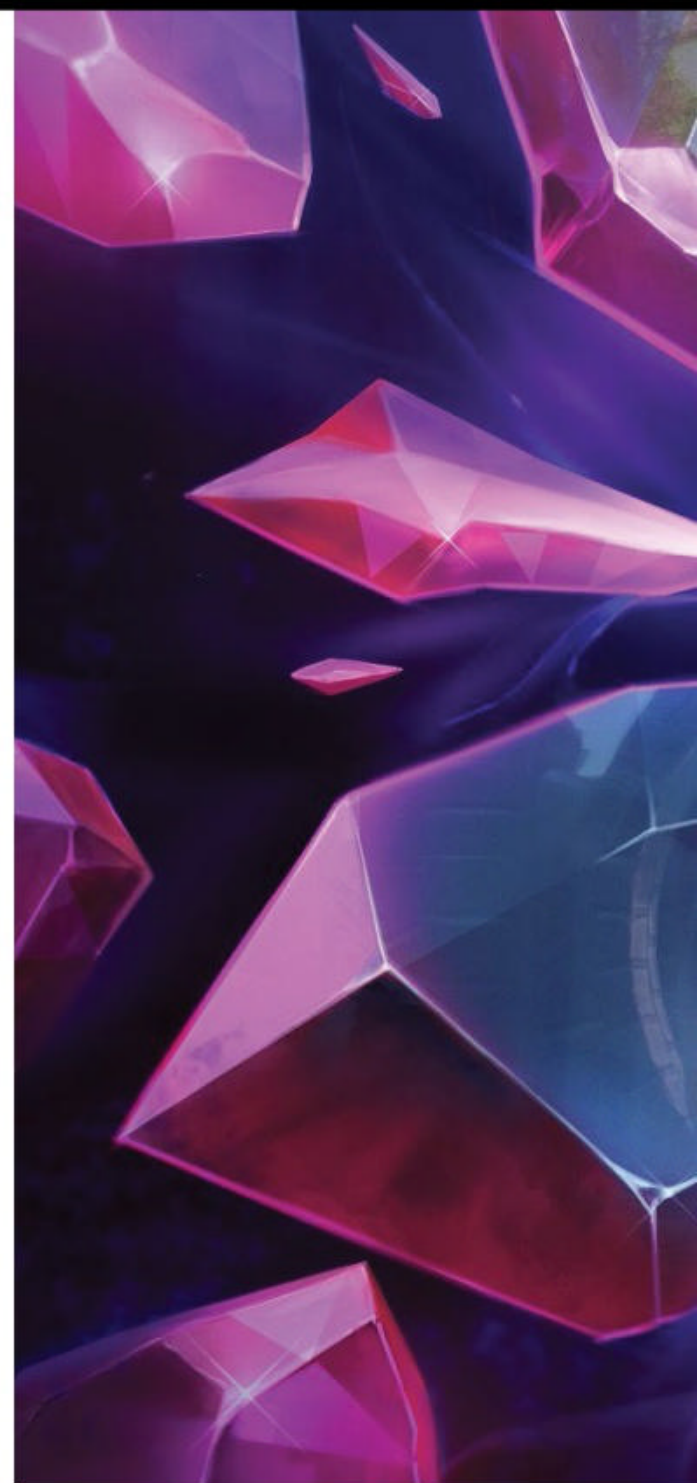
In most RPGs, the majority of NPCs are set dressing, existing to give locations the illusion of life. Trying to talk to them might only elicit a quick canned response rather than kicking off a conversation. But in *Witchstone* there are no truly incidental NPCs—all of them have relationships, points of view and the potential to become a problem-solving tool. And by learning more about them and using your skills to gain insights into their personalities and desires, you can exert more influence over them.

PLAYED  
IT

## FRIENDS WITH BENEFITS

A very early quest saw me trying to find a way inside a city's walls, and my silver tongue failed me during a conversation with a pair of guards at the gate. I heard about a secret way inside, through some catacombs, but that entrance was also guarded. Luckily, this particular guard was a shifty bloke, and told me he was willing to let me in if I could find some items for him. As a busy elf on an important mission, however, I didn't feel like wasting my time on a treasure hunt for a crooked cop, so I took another route: learning more about this guard, and using that information to make him trust me, after which I talked him into leaving his post. All I had to do was tell him that someone wanted to speak with him, which he believed, leaving the entrance unguarded.

I confess I absolutely felt like a master manipulator after simply getting a guard to leave his post, but obviously

MY SILVER TONGUE FAILED  
ME DURING A CONVERSATION  
WITH A PAIR OF GUARDS





**ABOVE:** Persuade, intimidate, lie or frame your way to success.

**LEFT:** Or get your fight on and straight-up murder foes.



## Unforetold: Witchstone

**RIGHT:** The game's tabletop roots are worn proudly.

**BELOW:** Murder by the Orient Express. Get it? Grade A that is.





*Unforetold: Witchstone*

» there are much more dramatic ways to change the world. “So let’s say you’re in a town, and you want to get rid of a faction that’s controlling the town,” says Boukhira. “You might just charge in and try to attack them. You could maybe find allies, convincing a couple of people to join you in that fight—if you want to fight but not be alone. You could be much more mischievous: we have a quite deep frame system, and you could frame one of the leaders of that faction for a crime, for a murder of one of his own faction officers to create internal strife, have them arrest their own leader, things like that, to gradually get rid of them.”

“You could be diplomatic, maybe try to use the really cool Influence system to negotiate something with them, or be evil about it and find some dirt about the leader and blackmail them.”

**GARGANTUAN MARK**

The mark you leave on the world can be gargantuan. You can wipe out whole towns, with every single person in it being killed off. *Unforetold: Witchstone* has a turn-based combat system where you can use a mix of magic and technology to take out your foes, but as you’re likely starting to realize, you can also annihilate the whole town without getting your hands dirty, instead pitting its citizens and factions against each other and just watching the carnage unfold.

This flexibility naturally has an impact on quest design. Instead of being given a journal bursting with side quests and main quests with prescribed objectives and paths, *Unforetold: Witchstone* gives you broad goals and lets you achieve them however you want. While there are quests, which the game refers to as opportunities, none of them are mandatory.

“We’re moving away from the old model of players having to go through a series of quests,” says lead game designer Philip Tam. “What we do instead is that players have goals, and you take on people’s opportunities, aka quests, to help you achieve the goal that you want to achieve. So if, let’s say, you want to get in the good graces of a faction, because you want to join them, then you will go and do the opportunities that they

provide, and get more appreciation from them. But it is totally optional. You can bypass that by knowing people’s wants, and manipulating them that way to achieve your goal.”

Tabletop role-playing has always influenced RPGs, but over the last few years that influence has grown dramatically. *Baldur’s Gate III* is probably the strongest example of this, at least when it comes to the RPGs of 2023, where its sandboxy, experimental vibe really captures the spirit of tabletop antics. *Unforetold: Witchstone*, however, feels even closer to that tabletop philosophy of just picking a route to achieve your objective and being able to do it.

**DO YOUR THING**

“The aspects of tabletop that we want to bring to *Witchstone* is that freedom and player agency,” says Tam. “In a tabletop RPG, players are more free to do stuff that they want to do. We want to give them more options that way, and the whole back and forth between a player and the DM, where players do certain things, and the DM responds a certain way. And our game tracks all these player choices and feeds them the best scenario for them to express themselves ... the whole point is that there is a dialog, always a constant dialog, between the player and the game.”

Often, when I’m in RPG towns running around chatting to NPCs, I’m eager to get out and go on an adventure, leaving the town’s denizens behind, but in *Unforetold: Witchstone*, even brief chats feel meaningful as NPCs feed me information that, bit by bit, allows me to construct a solution to my schemes. Big plans can be born from seemingly incidental conversations. It’s the same reason I can go through a whole TTRPG session just shooting the breeze with some NPCs and still feel like I’ve made some progress and experienced something anecdote-worthy. And just like a TTRPG, gathering information and influencing NPCs is just one solution: breaking into buildings and looting everything, fighting your way through dungeons and working for factions will all advance your goals.

If any of this tickles your fancy, you won’t have to wait long before you can take the game for a spin. As we revealed in the PC Gaming Show: Most Wanted, *Unforetold: Witchstone* launched into Early Access on January 25, 2024.

Fraser Brown


**GIVES YOU BROAD GOALS  
AND LETS YOU ACHIEVE  
THEM HOWEVER YOU WANT**



# LOST IN SPACE







March 2024. The Anomaly wreaks havoc in the galaxy and only your untested fleet stands before it. In **HOMEWORLD 3**, the stars are now battlefields.

*By Wes Fenlon*



## Homeworld 3



omeworld was the first RTS to concern itself with the epic,” says narrative director Martin Cirulis, who seems like he could talk about *Homeworld* for days. He has, after all, been writing its stories for two decades now, in the original, its prequel *Deserts of Kharak* and now *Homeworld 3*. As a grizzled writer of RTS unit barks, though, he knows sometimes a few words are all you need. “The theme of *Homeworld 1* is primarily survival, and destiny. By the end of it, they have found their true place,” he says. “*Homeworld 3* is: What are you willing to do in the face of someone else’s destiny?”

Can you hear it, when you close your eyes and think of *Homeworld*?

Can you hear Adagio for Strings, the awe and hope and mourning in the voices of the choir as the Mothership leaves orbit over Kharak in search of a better life?

There was a grandeur to *Homeworld* that other real-time strategy games weren’t attempting in 1999. The year’s big hit, *Command & Conquer: Tiberian Sun*, leaned into dark satire and FMV camp. *Age of Empires II*’s century-spanning historical campaigns may have been epic in scope, but *Homeworld* —*Homeworld* echoed the timelessness of myth.

“When I joined *Homeworld 1*, Kharak burned offscreen,” Cirulis

says, referring to the razing of your home planet in the original campaign. “It was a radio transmission. We sat down and went, ‘no, this is a cinematic piece as well as a wargame. We have to go back to Kharak. We have to be there while she’s burning and rescue people’. That’s part of what made *Homeworld* epic; that acknowledgment that it’s not just killing the pixels.”

So then. How do you make a sequel to a myth? After playing a good chunk of *Homeworld 3*’s campaign, I’ve surmised that Blackbird Interactive has come up with a bold, even innovative strategy: making a new videogame.

## WHO IS KARAN S’JET?

*Fact file on Homeworld’s famous Fleet Command*



Karan S’Jet was the Fleet Command that helped the Kushan people (Hiigaran exiles) leave the dying planet of Kharak and venture beyond the stars to find and reclaim their homeworld: Hiigara. She was also responsible for reactivating the Eye of Aarran, a massive hyperspace gate that was key to enabling a vast network of warp gates throughout the cosmos. Her progeny, Imogen S’Jet is now Fleet Command for the Hiigaran people, with Karan’s whereabouts unknown and listed as lost in space.



I've completed missions with objectives like capturing control points and hiding my mothership from enemy forces in a nebula. I've put my fighters into wedge formations and sent them corkscrewing towards enemy fleets, then shifted my attention elsewhere until a calm voice tells me that my squadron has been eliminated. Months before launch, *Homeworld 3*'s campaign is still peppered with unfinished cinematics, temp voice lines and jagged framerates not yet optimized for my Core i5 and RTX 3070, but it has a certain air to it—a now-endangered fully 3D RTS ripped out of time from the early 2000s, but looking and playing the way I remember them rather than the way

they actually were. The hard sci-fi tone hasn't changed much in *Homeworld 3*, which begins generations after the first two games. A young scientist, Imogen S'Jet, has spent her life preparing to serve as the organic computer at the heart of a new mothership, becoming the brain for a fledgling fleet, their hulls her new metal flesh. After living through years of peace and prosperity, Imogen is unexpectedly thrust into battle and cut off from the rest of Hiigaran society, charged with dealing with mysterious invaders from beyond the known galaxy.

Like the first game, *Homeworld 3*'s missions often have quiet moments that convey the isolation of space. The sober military tone of the unit

**FAR LEFT:** Every time the mothership jumps through a hyperspace gate, there's a chance disaster waits at the other end.

chatter never breaks character the way *Warcraft*'s grunts joke after a few clicks. But what is different is the way *Homeworld 3* is telling its story, with a more focused relationship between Imogen and intel officer Isaac Paktu, the hardened veteran counterpart to her fresh face.

### SCIENCE FICTION

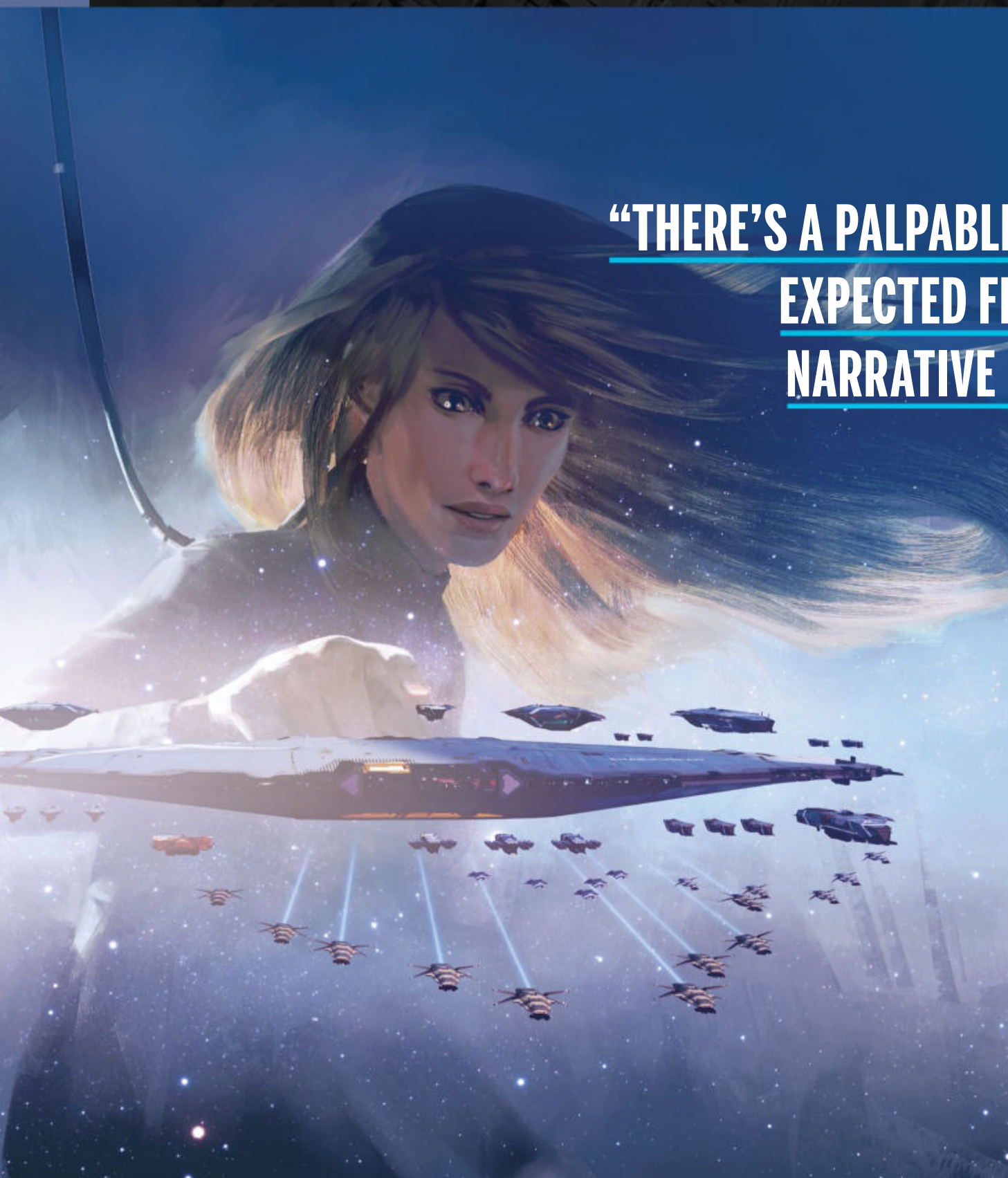
"There's a palpable shift in what's expected from a videogame narrative in 2024 vs 1999," says co-writer Joel Watson, who's a creative producer at Gearbox. "It was right around the time of *Homeworld* that I as a player started to feel like videogames were introducing cinematic narrative in a meaningful way. Flash forward 24 years, and look at a *Homeworld* game—I think an audience now would ask, 'Where's the character? How does Karan S'Jet feel about being a spaceship lady?'"

Gearbox's managing director narrative properties, Lin Joyce—the only person I've ever interviewed with a PhD in narrative systems

## "THERE'S A PALPABLE SHIFT IN WHAT'S EXPECTED FROM A VIDEOGAME NARRATIVE IN 2024 VS 1999"

design—says that "bringing more character into *Homeworld 3* necessitates finding moments for those characters to develop" without disrupting the action. "We're looking for moments where a character is going to feel a particular way about something that just happened in a gameplay moment, that either Imogen or Isaac will be compelled to comment on," she says. "Hopefully that adds context and emotion for the player."

Great sci-fi like *Battlestar Galactica* and *The Expanse* have brought flawed and conflicted characters into sci-fi in the last 20 years, but Cirulis points out that much of genre fiction still treats characters as heroes first and people second. "A series of books called *The Black Company* was my introduction to the idea that good characters could be wrong. Up until that point, in most genre fiction the good characters, things might not go their way, but





**“THE PROBLEM WAS  
THE SPACE: THERE WAS  
JUST SO MUCH SPACE”**





» they are always right, ultimately. And their character arc is proving their rightness. Those series of books opened the way for protagonists who could then just cock up horribly, and not spend the entire book proving they were right.”

Watson remembers how effectively *Battlestar Galactica* showed what happens to structures of power when everything falls apart and “guess what, you’re president, get used to it”. Imogen has to deal with a similarly abrupt burden of responsibility, except, well, weirder. She’s not just grappling with being in command of the fleet—she is the fleet, and feels the death of every ship like a shock to her nervous system while the stakes of the mission unfolding around her make the first games feel trifling by comparison.

“For 1 & 2, it’s like, this is the cradle of civilization. These battles are everything,” says Cirulis. “No; there was an empire you’d never heard of that’s been doing their thing for 100,000 years, and now those two spheres have collided. For the player, and the characters in this game, it is *Homeworld 3*. For the [villain], it is *Homeworld 47*. She’s had a lot of adventures, and she’s scary. Stuff you did in the first two games has made her not bored any more. She’s going, ‘Oh, there are new worlds to conquer.’”

## SPACE MOUNTAINS

I don’t know if art imitates life or life imitates art, but *Homeworld 3*’s existence feels like an epic in itself, with core contributors from the original game returning to make this one 24 years later. There’s Cirulis, composer Paul Ruskay, and Blackbird Interactive founder and CEO Rob Cunningham, who was *Homeworld*’s art director and one of the founders



TOP: *Homeworld*’s hyperspace jumps are objectively cool as hell.

of Relic Entertainment back in 1997. THQ bought Relic in 2004 and eventually went belly up, which is when Gearbox snatched up the rights to *Homeworld* in an auction. The second place bid came from Blackbird. They teamed up.

“It was profoundly satisfying to finally be making the game that you had in your mind, finished, for a long time before,” Cunningham says. “In essence, *Homeworld 3* was our original dream for *Homeworld 2*. The problem was, in the late ’90s, early 2000s, the vision for *Homeworld 3* was utterly impossible to make. We couldn’t do massive environments with these megaliths, so we had to wait 20 years.”

Cunningham had given up on the idea of a *Homeworld 3* until a few years ago, when his studio and Gearbox made *Deserts of Kharak*, set in the time before the clans of Kharak united to reach for the stars. While making *Deserts*, he realized the vision they’d had for *Homeworld 3* was now

doable, solving what he saw as a real limitation in the original games.

“*Homeworld 1* was a 3D strategy game set in space. The problem was the space: there was just so much space,” Cunningham says. “There was nothing in there that affected your decision making as a player. We had some asteroids, but that was it. We did our best to make it strategically interesting, but there was really no other decision making happening in the game space, unlike every other strategy game that has terrain with bottlenecks, chokepoints. Immediately we started thinking, ‘What can we do about putting terrain in space?’

“We started thinking of these amazing megalithic structures. In some of the backgrounds in *Homeworld 1* we painted them into the sky, but they were like dreams in the sky that just couldn’t be real. At the time we were thinking very simply: walls, giant flat surfaces with holes in them. We did tons of

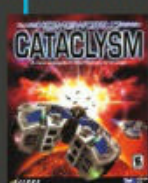
## A TIMELINE OF HOMEWORLD(S) *Catch up with the centuries-spanning strategy series*



**HOMEWORLD: DESERTS OF KHARAK**  
**2016**  
A prequel set before the events of the first game.



**HOMEWORLD** **1999**  
The original game follows the story of the Hiigaran people trying to reclaim their homeworld.



**HOMEWORLD: CATAclysm** **2000**  
Originally an expansion pack, *Cataclysm* ended up being a full release.



**HOMEWORLD 2** **2003**  
The long-awaited sequel took in-game graphics, world-building and narrative to a new level.



**HOMEWORLD MOBILE** **2022**  
Set 15 years after the events of *Homeworld 2*. A mobile-based MMO.



**HOMEWORLD 3** **2024**  
The much-anticipated and long-awaited third game in the series, developed by Blackbird Interactive.



*Homeworld 3*

**RIGHT:** Concept art of an enemy Battlecruiser. They're a bit flashier with the paint than your fleet.

**BOTTOM:** Scientist Imogen S'Jet becomes Fleet Command, bonding with the new mothership.



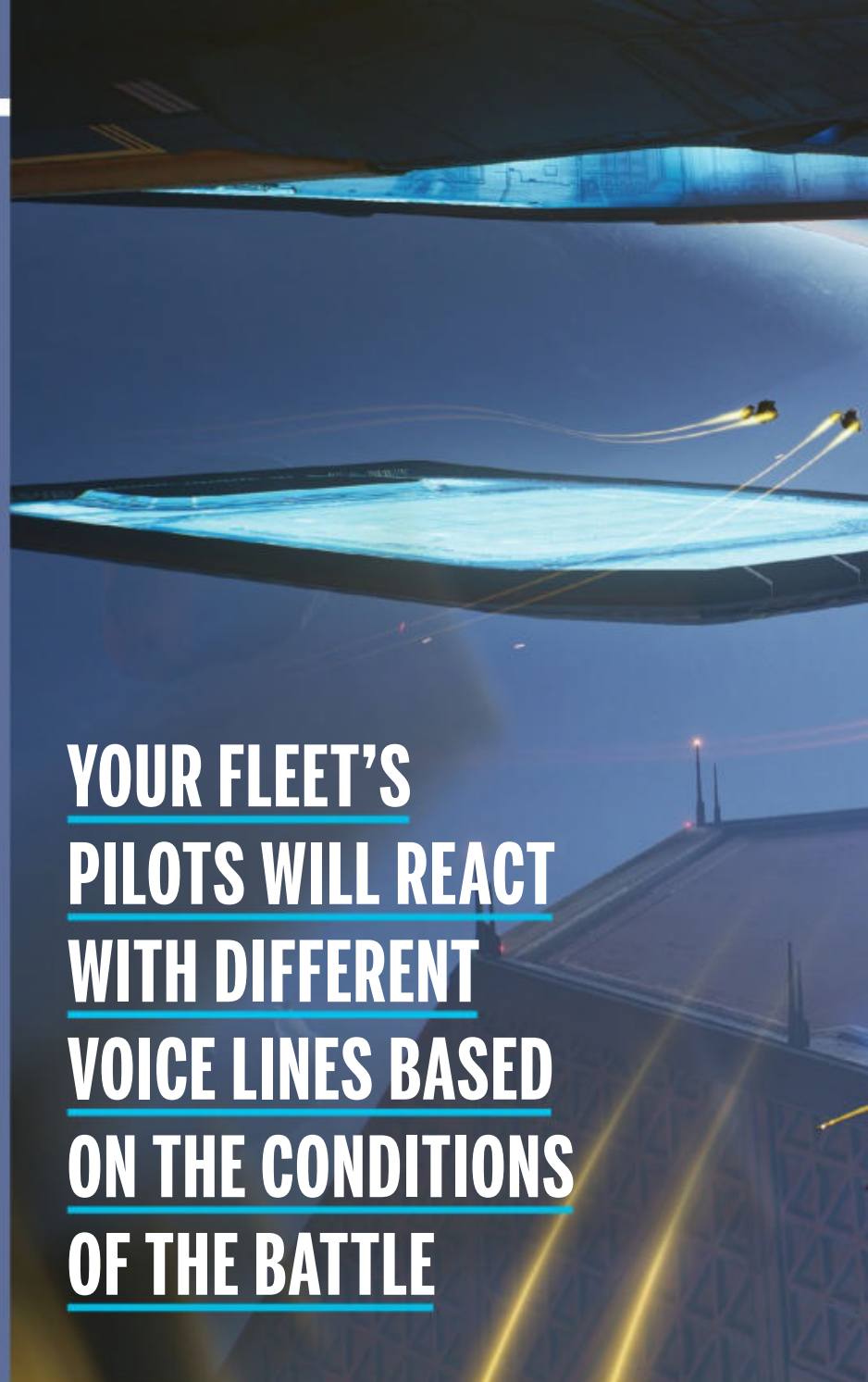
» sketches of Death Star-sized things that would create an interesting landscape for the player to move their units through, gaps the small ships could get through but the big ships couldn't, to make it feel like legit naval battles.

"With *Homeworld 3*, the terrain actually helps the player move around, because you can select your units and click on the terrain and they immediately go to that spot. They'll pathfind through gaps and trench runs and find their way to the optimal position. It's way easier to play *Homeworld 3* than it was to play *Homeworld 1*. I think it's a great thing for new players to be able to access the game in a really satisfying and fun way without being overwhelmed with the decisions and controls of the game itself."

*Homeworld 3*'s campaign missions take place among the vestiges of former battles, in asteroid fields peppered with rocks flying at lethal speeds, near space stations and towering hyperspace gates. Each feels like a concept art set-piece brought to life, but they're also just

as practical as Cunningham implies, making it much easier to send your ships to a destination with a quick click. That took lots of collaboration with the combat designers, ensuring the environments weren't just there for show and could actually factor into combat.

"We start off with different art moods of how levels should look and feel, what biomes we want to utilize so it's not the same over and over again, and then we explore what the terrain elements promote gameplay-wise," says *Homeworld* game director Lance Mueller. "Does this feel like a tunnel terrain field? Should we have some trenches, or be utilizing cover through basic objects in the world, like a small asteroid field, vs a piece of megalith terrain that's actually blocking incoming missiles if you hide behind it? We work with the art team on the mood of a level, then start blocking it out in game design, and then we work with programming to build toolsets around making sure that it's not too hard to do what you want to do [as a player], so the system's going to intuit what you're



## YOUR FLEET'S PILOTS WILL REACT WITH DIFFERENT VOICE LINES BASED ON THE CONDITIONS OF THE BATTLE

trying to do and pull you into elements of the terrain."

I've still struggled some while controlling *Homeworld 3*'s camera and gauging my fleet's positioning in 3D space, but at least I don't feel like I need a degree in astrophysics just to order them around.

### ELEGANT TOUCHES

One of *Homeworld 3*'s most elegant touches, and something I don't think I've quite seen in an RTS before, is the way your fleet's pilots will react with different voice lines based on the conditions of the battle. Like terrain, it serves a functional purpose, helping orient your attention to the right corner of space when something's happening. It was a welcome feature for me as I started venturing into larger maps, trying to keep track of two or three strike groups at a time. Much slicker, though, is the narrative the unit VO conveys.

"It's so beautiful," says writer Martin Cirulis. "You grab a minelayer and it'll go 'aye sir' or 'ready to go',







but it knows whether it's in combat, if it has enemies on its radar, or if nothing's happening. Then you give it an order, and depending on those conditions another guy on the ship will respond to the captain. If it's the middle of nowhere, he'll say 'roger command' and the engineer will be like 'this is the last one of the shift, right?' If the exact same thing

happens but there are enemy fighters around, the captain's response will be 'let's get this done' and the callback will be 'did they give us an escort this time?' That is such an amazing layer. It's making the game alive outside the script. In response to the player, it is a living world, and it's spectacular."

This system, masterminded by Blackbird audio director Dave Renn,

**ABOVE:** An early campaign mission tasks you with defending the mothership while it takes on supplies.

interlinks with other tendrils of the campaign's more passive storytelling—every ship has a named pilot, and your fleet carries over from mission to mission, so it's conceivable that you could grow attached to a particular ion frigate and keep it alive until you roll credits... at least if you're a much more skilled fleet commander than I am.

"That's a huge part of the vibe of *Homeworld 3*, making sure that the fleet you're interacting with isn't just a bunch of robots," says Mueller. "They're people trying to do the same job you're trying to do."

## SHIP IT

Among the developers there's a mirthful acknowledgment that *Homeworld* is part grand tragedy and part cool spaceships and laser beams—some wax poetic about the journey, while others are eager to talk about the animations of the missile frigates and fighters locking into formation for a strafing run. They want to zoom in to show me the way a nebula reflects off a dreadnought's

## DRAWN IN QUARTERS

Concept art of four ships in the Hiigaran fleet



### ASSAULT FRIGATE

The first frigate you unlock in the campaign, this trusty ship is best at warding off pesky fighters.



### BOMBER

As fragile as TIE Fighters, these bombers can briefly cloak to close the gap with their targets.



### RESOURCE CONTROLLER

*Homeworld's* trusty harvesters can also be used to capture enemy ships and add them to your ranks.



### SCOUT

The angry bees of your fleet. Fast and agile, but about as tough as wet tissue paper when enemy fire comes their way.





steel, or talk about how different weapons leave different scarring patterns on hulls that will persist across battles. And sometimes the vibes and the real-time strategy of it all sync up.

“It just looks cool to have all your ships in a delta formation or an X formation,” says Mueller. “There are soft counters to formations for power users, and using those things will modify the outcome of a battle, but it’s also based on your composition of that formation. So through trial and error and learning those elements, you’ll find more formations that work better for specific units. But if you just want to enjoy cool stuff, you can use them to make it look awesome.”

Mueller says *Homeworld* is meant to be a more macro-focused strategy game, where you can position your ships and then let them do their jobs. With *Homeworld 3* the team prioritized players being able to set the pace of battles, with the ability to pause combat at any time or slow time in 25% increments. It was a welcome option as I was learning to

manage my whole fleet, though the unfinished build I was playing comically slowed down all the voiceover clips along with the action.

Even though *Homeworld* doesn’t demand the unit micromanagement of *StarCraft II*, it does still seem important, with most ships having upgradeable active abilities that can turn the tide of combat. Vulnerable assault bombers, for example, will get shredded on approach to an enemy frigate unless you time the use of their cloaking ability. Corvettes are glass cannons unlikely to survive long in a skirmish, but getting off at least one use of their triple shot active ability will make their sacrifice worthwhile. But one way *Homeworld 3* keeps the focus on macro strategy is by accepting that those units are meant to be expendable.

“We really wanted to focus on frigates being our core gameplay,” Mueller says. “Think of them as tanks in World War II holding cities from inside—the city is like a terrain field in *Homeworld 3*, and those buildings are like our asteroid fields. [Frigates]

## HOMEWORLD HIVE MIND

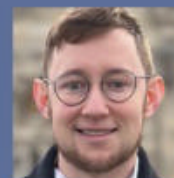
*Homeworld 3’s publisher has its own intel overseeing the franchise*



**LIN JOYCE, PHD**  
Managing director  
of narrative properties

**Writing for *Homeworld*:** “It has always struck me that *Homeworld* is perhaps the most perfectly named franchise, in terms of what it somatically offers. The concept of a home world is as rich as it is fraught. As a storyteller, when you get something that in one word communicates that level of complexity.”

***Homeworld’s* narrative verbs:** “In a strategy game players are going to tackle situations differently, so you have to be economical in your storytelling but also expansive. Those seem to be in conflict, and sometimes they are. That’s the challenge, that’s the fun.”

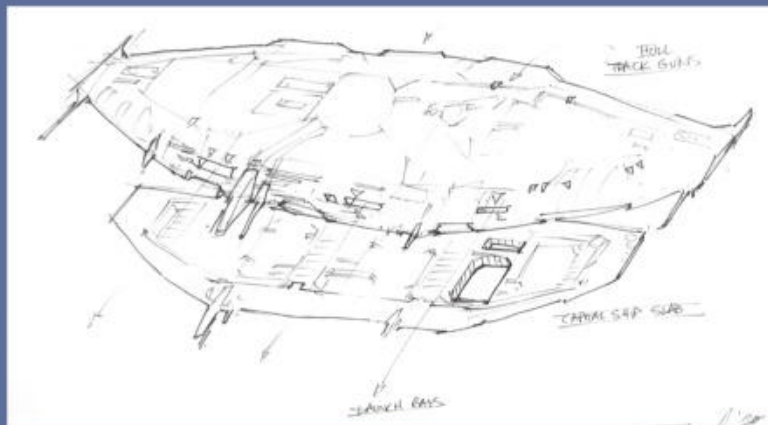


**NATHANIEL WATTENMAKER**  
Director of brand

**Discovering *Homeworld*:** “I was ten when I stole *Homeworld* from Walmart out of a jewel case. True story. I brought it home and I could run it on my dad’s Gateway PC at 3-5fps. I found in it the story of Exodus, and as a Jew that was immediately meaningful to me. It was the first time I had felt really seen in that way in media.”

**Working with Blackbird:** “All the founding team of BBI are fine artists, and we’re entering the room as professional writers. They’re entering the room as some of the best sci-fi artists of their generation. And it’s like if we nail how we collaborate, this game is going to fucking rock.”





**FAR LEFT:** *Homeworld's* ships ain't small, but the environments manage to make them look puny.

**LOWER LEFT:** Intel officer Isaac always has a bit of military wisdom in a crisis.

are more survivable in general, but there are elements from the strikecraft class that counter them.

"*Homeworld 1* and *2* were known for very hard counters for units. You'd need an assault frigate or flak frigate to take out fighter units. For *Homeworld 3* we're trying to soften that as much as possible, and terrain's a very big factor for softening counters. When we were designing units we wanted to make sure there's a role for everyone, so you'll have your sniper units, your short range

CQB units, and your more tanky get-in-there disrupter units." Counters are completely shaken up in *Homeworld 3's* War Games mode, a co-op roguelike counterpart to the campaign. In War Games you can unlock a range of ship archetypes and earn modifiers in a match that change a frigate's weapon type or give fighters increased damage at the expense of range.

It's also possible to play *Homeworld 3* without caring much about which ship outguns which. "You definitely don't want to talk to me about my style of gameplay," laughs Rob Cunningham. "I'm so busy cinematically moving the camera around and creating

## "WHEN WE WERE DESIGNING UNITS WE WANTED TO MAKE SURE THERE'S A ROLE FOR EVERYONE"

the battles just to watch stuff blow up, getting into the music and voice—I'm rubbish at playing the military. I'm zooming in, following [ships], and fantasizing like I'm in Hollywood and this is a big movie. And then I start drifting off and wondering when the [hyperspace] gate was built, and by whom. Then I lose, because I'm totally not playing the game.

"When all the moving parts are working properly and the art is there and the effects are there and the sound and the music, this incredibly complicated ballet of interactive systems working so beautifully... I'm in the world, the edges of the computer monitor have dissolved and I've just gone in there. That's why we do this. I mean, that's it. That's why we make these games." ■



# KEEPING

# IT RAIL

**TRAIN SIM WORLD 4**  
and the unique  
fascination of simulators

*By Phil Iwaniuk*







## Train Sim World 4

Playing sims can be meditative, even therapeutic experiences.



H

ave you ever sat down and actually considered how a train moves itself forward? Matt Peddlesden

has. As executive producer on Dovetail's *Train Sim World 4*, he's thought about it more than most people. As he tells me about the inner workings of locomotives at Dovetail's HQ in England, one thing becomes clear: if this wasn't his job, he'd still be satisfying his passion and curiosity for trains.

That's not a constant across the game industry. Not everyone you talk to is truly passionate about loot rarity, or

brutal melee takedown animations, or seasonal skins. But over here in the world of simulators, they march to the beat of a slightly different drum. There's an inherent passion here. You get the sense that many developers in this space are working simply because they want to see a certain thing made and then play it, and there's a high amount of crossover between content creators and developers as a result.

It's still gaming, more or less, but the rules are different. There's an ultimate realism to strive for, and performing even mundane actions in a recognizably authentic way gives the sim fan their thrills. It's why there's a button for the windshield wipers in *Assetto Corsa Competizione*.

It's why you spend 20 minutes going through checklists before getting airborne in *Flight Simulator 2020*. And it's why Peddlesden's team has thought long and hard about the exact distribution of braking pressure between carriages in *Train Sim World 4*'s roster.

This is the seventh release of the series, not to be confused with Dovetail's *Train Simulator* releases, and features three routes across LA county, Austria and England's own East Coast Main Line. For the community, it's a new base into which they can plug DLC from previous releases and build their personal library of routes and vehicles. For Peddlesden, it's the expression of a lifelong fascination.

"I've been interested in trains all my life," he tells me. "My dad was a train and bus enthusiast. We used to go out trainspotting every weekend. There's photographs of me when I was small, sitting on the ground [at the train station], playing with a toy train while they've got the proper ones behind me." It's been about trains for as far back as Peddlesden can remember.



**"MY DAD WAS A TRAIN AND BUS ENTHUSIAST. WE USED TO GO OUT TRAINSPOTTING EVERY WEEKEND"**



## ACTION STATIONS

*How a train simmer spends their time*

**40%** Third-person carriage-ogling. Look at the way the light bounces off that logo.

**26%** Double-checking brake pressures and wondering why they're not moving

**20%** Breaking speed limits in order to arrive on time and feeling genuinely guilty about it.

**13%** Studying old Hitachi console manuals to check authenticity, nodding sagely.

**1%** Arriving on time.



That interest escalated when train simulators started entering the game industry. For people like Peddlesden, the advent of *Microsoft Train Simulator* in June 2001 was the first chance to take the step beyond the model train sets and into something more interactive. It was also the first step towards making games. "One of the things I started doing was content creation," says Peddlesden. "I started teaching myself how to do my own repaints of things and sharing them."

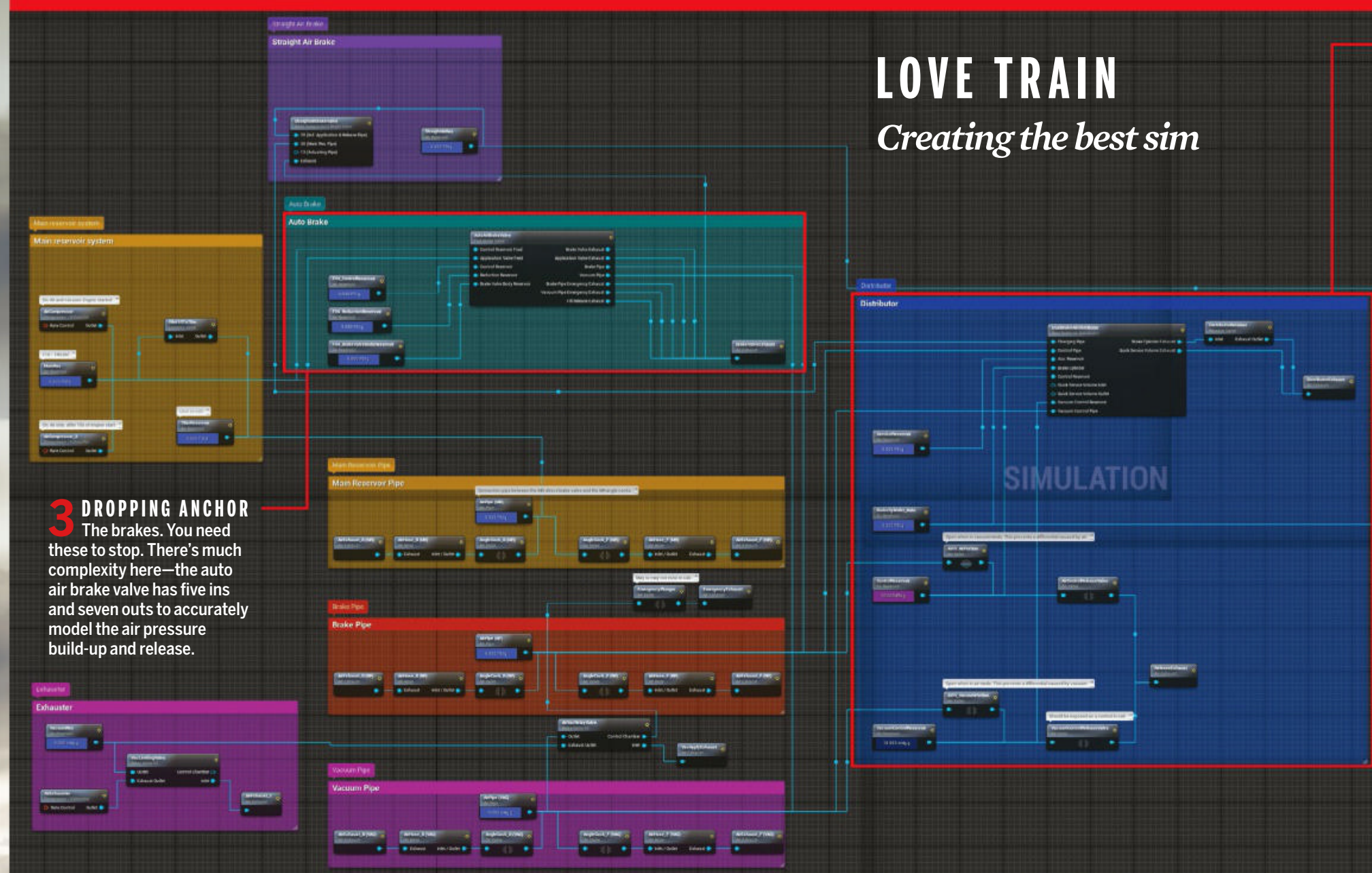
From there, he began to collaborate. "I started working with other commercial groups and got some of my work published in add-ons. And I helped other third-party add-on developers with the bits they were missing. In one case there was an add-on called LTV or Erie Mining Company and they were missing a cab. So I built the cab for them."

That led to Peddlesden running a website called UK Train Sim, which ran for over 20 years and hosted a quarter of a million members at its peak. With access to a whole community of like-minded creators, he began



# LOVE TRAIN

Creating the best sim



## 3 DROPPING ANCHOR

The brakes. You need these to stop. There's much complexity here—the auto air brake valve has five ins and seven outs to accurately model the air pressure build-up and release.

» co-ordinating the development of bigger add-on pack projects with multiple collaborators and disciplines involved. The train enthusiast has inadvertently become a game developer.

## SIMULATOR DEVELOPMENT

And that's not an uncommon story in the realms of simulator development. There have been tales of modders making the jump into development for as long as there have been modders and game developers, but in sim development it stands especially to reason: there's nobody in the world more passionate about getting a carriage livery exactly right as the person who's made it in their own time.

"I've always wanted to have this blend," says Dovetail CEO Jon Rissik. "Amazing people who are passionate about trains and train simulation, supplemented with young people out of university and videogames professionals."

Having a passion for the subject matter is a common route into the studio, Rissik explains. In the 'old days' that meant the team would go home and play the game they'd just been developing all day. There was no line of delineation between work and leisure. Times have changed since then. Processes refined, work-life balances attained. Nevertheless, Peddlesden took part in a 28-hour charity stream "off his own back" days before our conversation.

It's not just the blurry line between player and developer that marks simulators like *Train Sim World 4* out as separate to the mainstream industry. It's the business model too. *Assetto Corsa Competizione*, the people's racing sim, launched in 2019 and has released a steady stream of car and track packs since then. *Flight Simulator 2020* has not only released numerous first-party DLC packs but also hosts a third-party marketplace stuffed to the gills with extras. And both of Dovetail's train sims have attracted attention for the volume of DLC available in them.

At the time of writing, *Train Sim World* has released 88 individual pieces of DLC content since release in September 2023. Prior to that, *Train Simulator 2020* made the headlines for listing over \$10,000 in DLC on its Steam store page. It's clear that sim developers view their products as platforms, as much as games themselves.

"The thought that I've always had," says Rissik, "is that if you go to the market, they don't expect you to buy everything in [there]. No retailer would expect you to

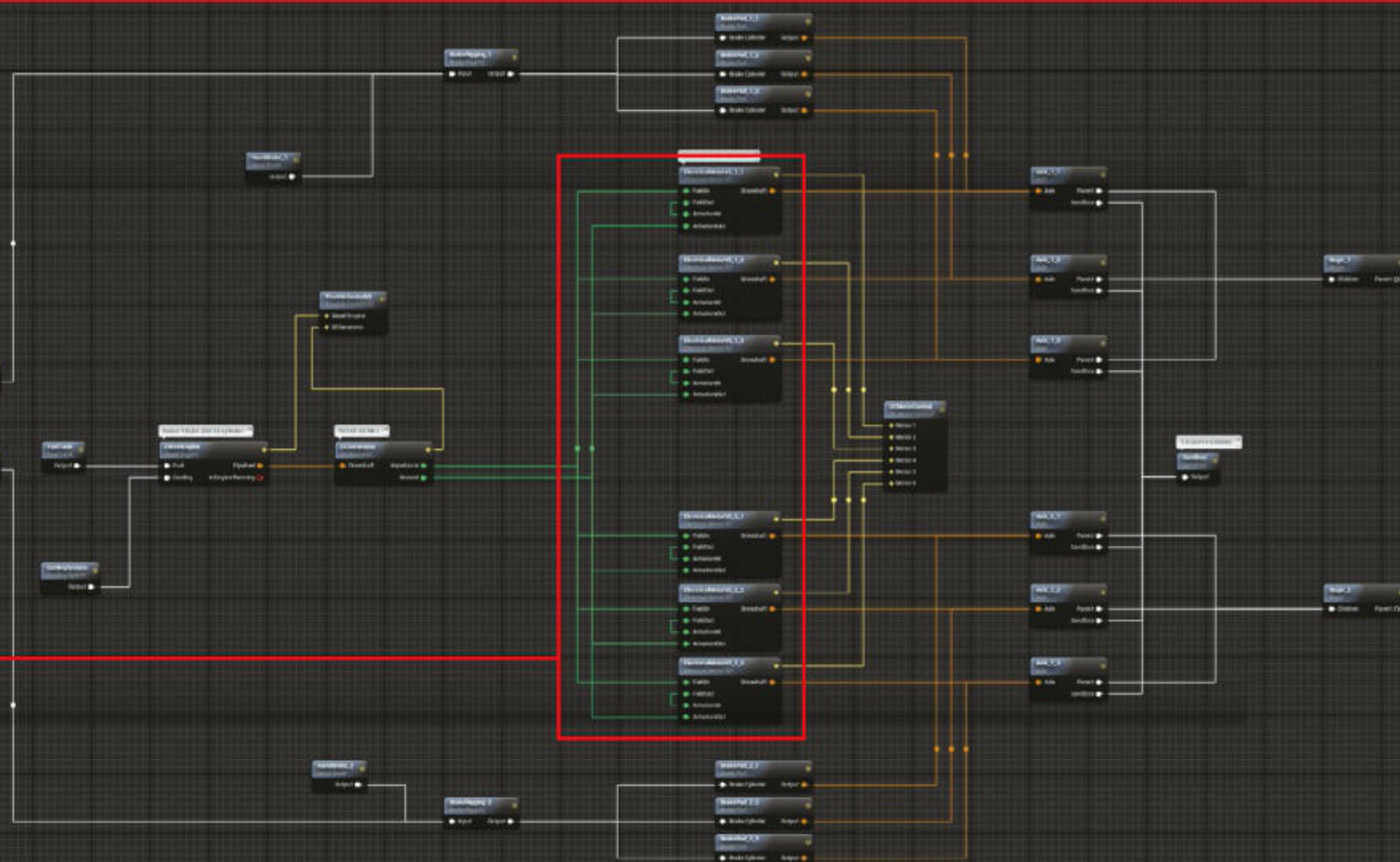


## 1 LINES OF DUTY

Dovetail builds all its trains using simugraphs like this. Every box is a component. They're all connected, and interact with each other according to realistic physical and mechanical parameters.

## 2 MOTORING ALONG

This is what an electric train's motor array looks like. A diesel engine moves a flywheel connected to a driveshaft within the DC generator. That feeds six electric motors.



**SOME PEOPLE LOVE 1970S BRITISH  
DIESEL LOCOMOTIVES BUT HATE  
HIGH SPEED ELECTRIC TRAINS**

buy everything in their store. We don't expect you to buy everything that we make. What we want to do is offer you a range of stuff. And then you dip in and out as you want to because in this enthusiast market, it's a bit like music tastes, there's genres within genres. People want to collect different things."

Some people love rock but hate reggae. Some people love 1970s British diesel locomotives but hate high-speed electric trains. The purpose of Dovetail's voluminous DLC, Rissik says, is to give people options.

Perhaps not by coincidence, it's a business model that bears some resemblance to EA's famously profitable market position. In the olden days it was about bringing an unending stream of *Sims* expansion packs to shop shelves. Then it evolved to Ultimate Team microtransactions. It's ironic, really, that the sims have drawn so much inspiration from *The Sims*.

Dovetail was itself founded by an EA veteran, Paul Jackson, in 2008. Jackson had published *Rail Simulator*, released in 2007, motivated in no small part by his own

personal passion for trains. The sim itself didn't take off, but when the company who owned the technology behind it came knocking some years later, Jackson spotted a business opportunity.

The newly formed Dovetail identified that while it had been very difficult for *Rail Simulator* to turn a profit selling physical copies and competing for attention on shop shelves next to *Call of Duty* and *Need for Speed*, increasingly popular digital distribution paths like Steam offered a way to hit the enthusiast markets. Classic long tail economics: you no longer had to front the cost for 50,000 boxed games. It was financially viable to sell 5,000 copies digitally, because there was no

mechanical cost incurred in the manufacture of each copy.

"Steam was very welcoming to us," says Rissik. "They liked the fact that we were bringing a [type of] player to the platform that was new for them. We were bringing new people into Steam, and they gave us incredible coverage, very supportive. They liked what we were doing and that really formed the foundation of the company back then."

Rissik's CV goes back to EA too, and both he and Jackson were taking notes about the successes the company had made during the early 2000s. "I think it's fair to say that products like *The Sims*, and the attach rate [of the expansion packs] was part of the philosophy. I worked



I WONDER IF, LIKE SIM RACING,  
THE APPEAL IS SIMPLY DEMONSTRATING  
COMPETENCE AND SKILL



on *The Sims* with Paul. I worked directly with the studios, so I had a really good understanding of how it worked, whether it's the development studio serving up new packages, or allowing the content creators to make their own content."

## COMMUNITIES

That second point is key. Because as much as simulators might attract ire for the long lists of DLC they sell, they also host communities that generate a vast amount of content that you can download and plug into your game for free. And even beyond that, there are the third-party expansion sellers, cottage industries which spring up around major releases like *Train Sim World 4*.

## STEAMING AHEAD

Rail sim history in four screenshots



### SUPER LOCOMOTIVE 1982

The side-scrolling Japanese progenitor, designed by genre godfather Fukumura Mizunaga. Zero ray tracing, anywhere.



### ONGAKUKAN TRAIN SIMULATOR 1995-2005

Japan carried the torch for train sims into the '90s with Ongakukan's forensic sim series. Didn't become a big deal in the West.



### MICROSOFT TRAIN SIMULATOR 2001

The moment virtual locomotion went mainstream, thanks to Mr Gates and his publishing arm's robust sim.



### TRAIN SIMULATOR 2009

Dovetail entered the chat. Now known as *Train Sim Classic*, the original release was a big deal for Steam's storefront thanks to its DLC.





It looks impressive, but it's actually stuck at a broken signal.



It shouldn't work on paper really. Why would anybody pay money for additional content when there's more of it available for free than behind a paywall? And yet it does work. It worked for *The Sims*, which spawned early classic modding sites like TheSimsResource, 7 Deadly Sims and The Well Dressed Sim, but which also charged \$20 for boxed expansions that added new content. And it appears that a similar equilibrium is achieved in *Train Sim World*.

"That's how the sim space has always worked," says Rissik. "Since *Microsoft Flight Sim*, *Microsoft Train Sim*. I guess you might call it open source. It's freely available to anyone to use." Dovetail works directly with content creators via a third-party team which works out the legalities and the logistics of bigger projects, then allow those creators to sell on Dovetail's storefront "and take a 100% profit".

Working with amateur creators globally has opened doors to new opportunities for the *Train Sim World* series. It's shone a light into geographic blind spots and

allowed the community to pour its passion into the gaps left by the base games. And it brought people like Matt Peddlesden into the fold.

Sitting next to the exec producer as he methodically and deftly moves an enormous multi-carriage train out of a small Austrian station, I wonder if, like sim racing, the appeal is simply demonstrating competence and skill in an authentic setting. In other words, do train simulator drivers care as much about arriving into the station on time as sim racers care about leaderboard times?

"It's a procedural thing," says Peddlesden. "It's about getting every destination blind correct, getting the right headlights, because

you've got different types of headlights on the trains. Using the American trains, it's about using the right horns at the right time... there's all these procedures that train enthusiasts like to learn."

Sim enthusiasts, then, are to PC gamers what goalkeepers are to footballers. We're all playing the same sport, but we're looking at it from two different perspectives, fascinated by different aspects and performing diverging tasks. The software is more of a platform than a game, and the enjoyment is intrinsic to the authenticity of it. But in the end, we're all just using our big RGB boxes to escape to virtual destinations where our job's way more fun. ■



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# BREAKING POINT

**COD: MODERN WARFARE 3** gives the impression that it was made too quickly

By Morgan Park

**R**ain or shine, the *Call of Duty* must flow. It's a mantra that's served Activision well for 20 years as the series grew from yet another WWII shooter to the best-selling franchise of all time. For 18 of those years the series has maintained a streak of annual releases, regularly shattering previous records with only the occasional bump in the road when a less-good, but still fun, entry came along.

*Modern Warfare 3* is bigger than a bump—it's an indictment of the *Call of Duty* machine, a rushed product created to fill a \$70 gap in Activision's calendar and sold as something

(reports suggest) it was never meant to be. Let's not mince words: this is an expansion in everything but name and price. But even if it were more substantial, I'm not convinced that *Modern Warfare 3* would be satisfying.

Despite riding the coattails of last year's excellent *Modern Warfare 2*, catering to potent 2009 nostalgia, and bringing welcome improvements to Gunsmith, many of Sledgehammer Games' original contributions come off as superfluous, or simply not as good as what we had before.

This is a series low point. It's the first time that *Call of Duty*'s \$65 barrier to entry has felt like an insult to longtime players, and yet, the series' live service model means fans who want to participate in *Call of Duty*'s events and battle passes for the next year have no alternative. Outside of Warzone, *Modern Warfare 3* is where the *Call of Duty* action will be throughout 2024, for better and worse.

## HOMECOMING

*Modern Warfare 3*'s unusual makeup is immediately obvious in multiplayer. For the first time in series history, there are no original 6v6 maps at launch. Instead, Sledgehammer reached into the *CoD* vault and remade all 16 launch maps from the original *Modern Warfare 2* (2009). This nostalgia payload was

one of the first things announced about *MW3*, and damn it, it got me really excited. The cultural penetration of *Call of Duty* for teens of the late 2000s cannot be overstated, and *MW2* was arguably its peak. Even as personal doubts around this year's *CoD* simmered, I maintained that the warm embrace of maps I haven't seen in 14 years could alone justify *Modern Warfare*

*3*'s existence. Eh, not really.

I'm having a good time revisiting favorite maps, and I can't say enough nice things about Sledgehammer's attention to detail in crafting them. Terminal, Highrise, Favela and Sub Base near-perfectly recapture the vibe of the originals.

Maybe because so many of us already know these maps from those formative years we spent marauding

## NEED TO KNOW

### WHAT IS IT?

A direct sequel to *Modern Warfare 2*

### EXPECT TO PAY

\$70

### DEVELOPER

Sledgehammer Games, Treyarch

### PUBLISHER

Activision Blizzard

### REVIEWED ON

Intel Core i9 9900KS, 32GB RAM, GeForce RTX 2080 Super

### MULTIPLAYER

Yes

### LINK

[shorturl.at/crJ89](https://shorturl.at/crJ89)

through them with energy drinks at our sides, *Modern Warfare 3* might be the most immediately sweaty *Call of Duty* I've played, though much of that impression could be laid on competitive-friendly updates to movement (more on that later).

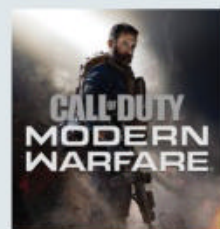
The problem with *Modern Warfare 3*'s maps is a predictable one: they don't all hold up. Getting 16 maps at launch (plus a few more for non-standard modes) is a rare treat in our modern age of service shooters, but honestly, there are a lot of stinkers that probably should have stayed in past decades: Estate, essentially one big hill with a house on top that always devolves into a sniper mosh pit, can go straight in the bin, as can the bowl-shaped meat grinder Afghan, the wonky sightlines of Underpass, and the laughably inconsistent spawn killings of Scrapyard. They're just... very 2009.

It's strange seeing Infinity Ward's old work retooled with new *CoD* in mind. Sometimes the old and the new clash in confusing ways, like how the old maps now have functional doors like in modern *CoDs*, but they also still have fake doors in the same spots they used to, creating awkward moments where I'm not sure which buildings I can and can't go inside.

I have jumbled feelings about Sledgehammer's throwback maps. On one hand, they're exactly what I hoped: true to the originals and a feel-good bullet point that longtime fans can rally behind. But it cost us the usual volley of brand-new maps, and I'm missing that more than I expected. It's bittersweet to already have every map 'figured out', and disheartening to take off the rose-tinted glasses on classics I thought I loved. There's an overdose of familiarity going on here that's making this map pool stale long before *Call of Duty*'s usual 'best by' date. Were this a map pack for last year's *Modern Warfare 2* reboot like it certainly seems was the plan at some

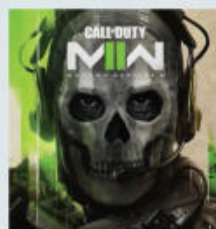
## MODERN WARFARE REBOOTED

*Gruff men and guns, lots of guns*



### COD: MODERN WARFARE 2019

The first game in a reboot of the original *Modern Warfare* trilogy of games. Created by Infinity Ward.



### COD: MODERN WARFARE II 2022

Infinity Ward returns for the second game in the rebooted trilogy. Fastest *CoD* to make \$1 billion.



### COD: MODERN WARFARE III 2023

Infinity Ward passes the trilogy to Sledgehammer, which had developed *CoD: Vanguard*.



# Call of Duty: Modern Warfare 3

point, it'd be one of the greatest single add-ons in FPS history. But as a map pool carrying the weight of an entire standalone game? It's just fine.

## ASSEMBLY LINE

*Modern Warfare 3's* new guns inspire a similar shrug. The arsenal of around 30 launch weapons are a mix of reimagined guns from *MW3* (2011) and original twists on old designs. At least, I think there are some old favorites in there—*Modern Warfare 3*, more than any *CoD* of recent memory, has a serious case of boring guns. A good third of the new ones are assault rifles and 'battle rifles' (which are just ARs that shoot slower) that closely share a design language, or in several cases are the same gun with slight tweaks.

*Modern Warfare 2* recycled its guns in the same way with its 'weapon platform' concept, but it also made room for variety in M4 variants, the AK family, bullpups, integrated silencers, and an entire fleet of MP5s that had distinct strengths and weaknesses.

*Modern Warfare 3's* guns blur together, hard. Half of the time I can't tell which ultra-popular assault rifle killed me: the fast-firing MTZ with steady recoil and an extended magazine, or the fast-firing MCW with steady recoil and an extended magazine. Overlapping functionally is nothing new in *CoD*, but personality is something that Infinity Ward and Treyarch usually get right—even if the differences

between an M4 and an AK boil down to centimeters on a stat sheet, style generates a gravitational pull to our favorites. It was the concussive roar, battle-worn scratches, and confident reload of *Modern Warfare 2's* M4 that made it my go-to just as much as its damage value, but I'm not feeling the same pull toward any

particular gun this year. Sledgehammer's weapons are boxy, fresh-off-the-assembly-line machines, none of which stand out.

Some categories of guns seem like they were included without much consideration, or

## Half of the time I can't tell which ultra-popular assault rifle killed me

out of obligation. I can't figure out why I'd ever use an SMG in *Modern Warfare 3* when they're just worse assault rifles, and the 33% increase in player HP since last year has dulled the appeal of single-shot marksman rifles. The absence of both during my first week of matches suggest the community agrees. It's a small comfort that *Modern Warfare 3's* 'carry forward' feature means I can still use all those cool guns I leveled-up a year ago, though as I swap back to my trusty Basilisk revolver, I wonder why I'm playing *Modern Warfare 3* just to experience *Modern Warfare 2* again.

I'm a fan of the few truly novel twists on the more traditional guns, like the Longbow, a quirky AK-47-shaped sniper rifle with a bolt action that defies all convention, and the COR-45 handgun that can be converted into a secondary SMG with a special 'Aftermarket' attachment bolted to it.

## MARKET RUN

It's in these details that Sledgehammer has done great work. *MW3's* handful of Aftermarket Parts go the extra mile in meaningfully changing how a gun behaves, or enabling hybrid playstyles, like a dot sight with an integrated laser for improved hipfire. *Call of Duty* desperately needs more attachments like this to make Gunsmith matter, because its current sea of suppressors, grips, handles and stocks that minutely see-saw the same three stats up and down is doing absolutely nothing for me these days.

I'm less excited about the sledgehammer taken to *Modern Warfare 2's* movement. Infinity Ward made the controversial choice to slow down operators and nerfed common movement techniques in hopes of encouraging more thoughtful, tactical play. I think it worked, but Sledgehammer had the opposite idea. One week against the 'movement kings' of *Modern Warfare 3* has shown how minor changes to mobility can disrupt *CoD's* whole flow. Empowered by quick mantling, slide canceling, and generous mid-air accuracy, my matches are full of players who lean on these cheesy techniques to 'outplay' those who prefer to keep their boots on the ground (me).

The sweatiest corners of *Call of Duty's* community will tell you these are skillful maneuvers that make *MW3* a deeper game. Maybe so, but they also make the action overly twitchy, unpredictable and thoroughly obnoxious.

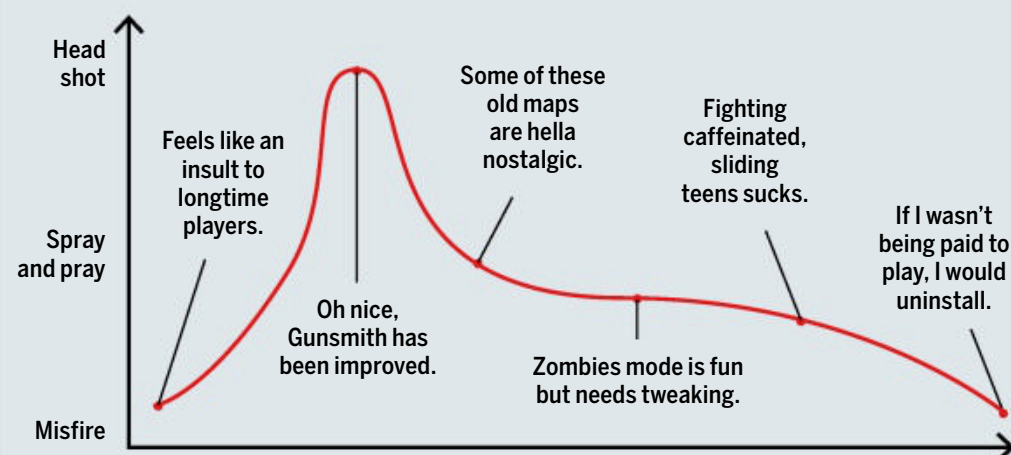
## RUSH JOB

The biggest casualty of *Modern Warfare 3's* thrown-togetherness is the campaign. It speaks to how consistent *Call of Duty* campaigns usually are—with ten-to-fifteen minute missions, a blend of stealth action and frantic battles, a tidy conclusion at hour five or six—that you can pretty quickly tell something is off this time. The story, a loose retelling of the Makarov story from *Modern Warfare 2* (2009), introduces a new mission format that borrows traits from *Warzone*: the Open Combat Mission.

Open Combat crops up as early as mission two of the story, and trades *CoD's* usual flavor of follow-the-leader missions for solo infiltrations into small, but dense

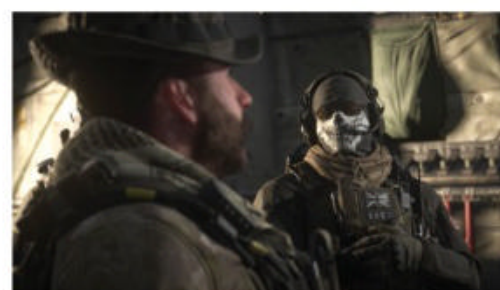
## LOCKED AND READY TO, WAIT, WHAT?!

The Modern Warfare 3 experience





## Call of Duty: Modern Warfare 3



**ABOVE:** Sliding down the chute while firing is mandatory.

**FAR LEFT:** Survival is the name of the game. And shooting stuff.



Zombies mode is back and, yes, it's a highlight.

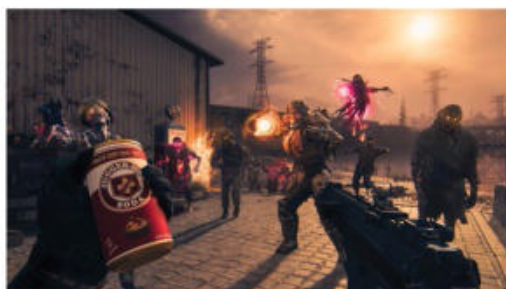


## Call of Duty: Modern Warfare 3



**ABOVE:** The star of CoD returns... Captain Price's mustache.

**RIGHT:** Wait until you see the goggles over their eyes.



Gritty urban warfare? Nah, buggy gun fun!





» sandbox maps. It's a little strange at first to be looting armor plates and pinging enemy squads in Campaign, but the format really works.

I loved getting to stretch my legs in a PvE environment and get rewarded for exploring. Regular Campaign missions offer their own kind of fun in constantly swapping out your guns for whatever enemies drop, but it felt great to chase those moments with an Open Combat Mission with weapon caches containing fully kitted rifles, launchers and gaudy gold-plated Deagles every few feet. Firefights aren't as rote with enemies dynamically flooding into the map from every direction, and I was encouraged to try different approaches after dying.

As a distraction from *Call of Duty's* main vehicle for storytelling, Open Combat Missions are a small triumph. They're brief, but pack a lot of variety into small spaces and never get bogged down by NPCs who move at a snail's pace. The problem is that they're not distractions, or side adventures. Open Combat makes up around half of *Modern Warfare 3's* four-hour runtime, and a lot of them come across as filler to pad out a mission list noticeably light on longer, traditional story missions.

The few story missions we do get lack *Call of Duty's* usual showmanship. A *Hitman*-like infiltration level ends minutes after it begins. An intense plane hijacking, while better conceived than *MW2's* infamous No Russian level, is practically a cutscene that's, once again, strangely short.

The awkward pacing has a huge effect on the story, too, an area of *CoD* that I'm historically not very picky about, but flows so poorly in *MW3* that it became distracting. Because so much of the campaign is spent in disjointed Open Combat levels with little storytelling inside of them, interstitial scenes of jpgs of the gang's faces talking over radio end up doing all the contextual heavy lifting. Price's rivalry with Makrov is underbaked and uninteresting, characters take field trips across the globe for thin reasons, and storylines that begin in *Modern Warfare's* last two reboots conveniently wrap up in ways that

feel like Sledgehammer is painting over missions it didn't have time for.

The weird times culminate in a poorly conceived, underexplained and baffling final mission that I can't possibly imagine matches Activision's original vision for this reboot trilogy. This is a campaign to forget.

## Squads of three deploy on the massive map with no particular goal

### EXTRACTION ZOMBIES

I know it's a weird year for *Call of Duty* when the only mode that I'm feeling the itch to play is Zombies. Activision conscripted Treyarch, the *CoD* studio known for the

*Black Ops* series and its distinct zombie maps, to develop *Modern Warfare's* Zombies. Instead of Treyarch's usual style of enclosed buildings with creature spawners in every window, *Modern Warfare* Zombies repurposes *Warzone's* new map, Urzikstan, and *Modern Warfare 2's* popular DMZ format for a sandbox take on Zombies that trades urgency for agency.

Squads of three deploy on the massive map with no particular goal. Sparse patches of zombies wander in the open while more lethal clusters lie in wait inside buildings. Like DMZ's extraction shooter rules, players are free to pick up contracts that serve as micro-missions, like

defending a zombie-purging machine, transporting supplies across the map, or clearing out infested complexes. Survival is ultimately the name of the game, but you can choose to extract from the map whenever you want and keep whatever you looted for the next run.

That bit might be a dealbreaker if the untimed survival gauntlets of *Black Ops* Zombies is the main thing you enjoy about the mode, but I'm finding a lot to like about *Modern Warfare* Zombies. It's definitely its own thing, but Treyarch did a commendable job adapting familiar concepts and powerups to uncharted territory. Yes, it's weird that you can just drive away from a zombie horde instead of having to skilfully kite them through hallways, but the gratifying hum of a Pack-a-Punched rifle remains divine, and I'm still blowing all my credits on the chance of a ray-gun in the random box.

It's a genre mashup that should feel as forced and improvised as the pitch suggests, but Treyarch's talent for PvE experiences prevails. This unconventional Zombies variant is actually the best thing going for *Modern Warfare 3*.

But I don't really boot up *Call of Duty* for its PvE. Multiplayer is where it's at, and this year I'm not feeling it. As I aimlessly hop between modes, fiddling with guns that bore me to tears, mourning old favorites rendered useless by 150 health pools, and contending with caffeinated teens encouraged to slide or hop into every gunfight, I'm realizing that if it weren't my job to cover this series, I'd probably uninstall *Modern Warfare 3* and cross my fingers for next year.

It's plain to see that this disjointed vision of *Modern Warfare 3* was not the product of years of meticulous planning. It was a pivot driven by tradition and the hubris of executives puppeteering the fleet of tireless *Call of Duty* creators who collaborate to do the impossible every year. *Modern Warfare 3* is an absolutely unessential chapter in the series' 20-year history, and I suggest you skip it. I wonder how *Call of Duty's* new masters at Microsoft will react. ■



### SAS FTW

How elite SAS soldier Captain John Price brings home the bacon

#### 1 FACIAL HAIR

Lusciously rich and voluminous at all times. Delivers +5 to manliness.

#### 2 BIG GUN

John always has his massive weapon in his hand. And in terms of guns he...

#### 3 HEADWEAR

John is famous for his headwear, which ranges from helmets to floppy hats to, er, nothing.

PC GAMER

VERDICT

*Call of Duty: Modern Warfare 3* is a disappointing anniversary for a series that should take a break.

47



# ALL OUT AT-TACTICA

The Phantom Thieves are back again to steal your hearts in **PERSONA 5 TACTICA**

By Lewis Parker

**I** love *Persona*. I have played nearly every entry in the franchise, spin-offs included, and I consider *Persona 4 Golden* and *Persona 5 Royal* to be two of the best games I have ever played. So be assured I don't say this lightly: I think *Persona 5 Tactica* might be my favorite *Persona* game of all time.

I certainly went into *Tactica* expecting to have a good time. Having followed its run-up to launch, I knew what I was in for: a tactical reimagining of the *Persona* games, mixing *Persona 5*'s flair with the mechanics of *Tactics Ogre* and *XCOM*. What I didn't expect was for *Persona 5 Tactica* to be my favorite game of the past year.

Though it's technically a spin-off—taking the characters from the hugely popular JRPG and transporting them into a new genre and art style—*Tactica* plays out more like a sequel, taking place directly after key story moments in *Persona 5*. Though it pares back or outright removes most of the slice-of-life elements of the series—attending classes, training your social stats, hanging out with your friends to raise

your 'confidant' level, etc—that results in more space for focused, nuanced storytelling.

## TACTFULLY WRITTEN

It's not even really a game about series main characters the Phantom

Thieves, in contrast to other spin-offs we've seen so far such as *Strikers*. Here, the cast you recognize essentially serve as backup to new characters Erina and Toshiro, two rebels attempting to

**The cutscenes are beautiful the voice acting has never been better**

overthrow the Metaverse's latest tyrannical ruler. I took an immediate liking to both—they're individually compelling personalities, but particularly play well off each other with their clashing ideals. Their relationship is all about how two people can both have good intentions yet have completely different

## NEED TO KNOW

**WHAT IS IT?**  
A turn-based strategy spin-off of *Persona 5*

**EXPECT TO PAY**  
\$60

**DEVELOPER**  
P-Studio

**PUBLISHER**  
Sega

**REVIEWED ON**  
AMD Ryzen 7 7700X,  
64GB RAM, Nvidia  
GeForce RTX 4080

**MULTIPLAYER**  
No

**LINK**  
[shorturl.at/tABWX](https://shorturl.at/tABWX)

approaches to solving the problem at hand. As Erina rushes courageously but thoughtlessly into the fray, and Toshiro takes a more considered but cowardly approach, both are brought to life with writing that's so engrossing throughout that I genuinely think it trumps the original *Persona 5*. I daren't say anything further—it's such good stuff that you should experience it unspoiled.

Though it may shed many of the mechanics of *Persona 5*, it's certainly inherited the trademark flair, and long-time fans shouldn't be disappointed. The menus and UI are just as impossibly slick, the cutscenes are beautiful and the voice acting has never been better. And while the Phantom Thieves may have been relegated to supporting roles in the main story itself, they still all get their individual chances to shine. They actually end up feeling like even more well-realized characters as a result, as they smoothly step into the role of sage and experienced advisors, imparting their hard-won knowledge of battling in the Metaverse to Toshiro and Erina.

## TACTICAL FLUKE

Combat in *Persona 5 Tactica* is reminiscent of the *XCOM* series, with a top-down grid layout and a focus on tactical gunplay. The twist to the formula is largely rooted in the One More mechanic, a holdover from *Persona 5* given a unique and extremely satisfying spin.

By either removing your enemies from cover, hitting them off of high platforms, or using your persona's abilities to inflict status effects, your next unit will be able to down the same enemy by employing a similar follow-up tactic. Any unit that downs an enemy will earn a One More and get an extra bonus action that turn, as well as being able to move a second time. With the right skills, personas and strategy, it is often possible to chain several One Mores together in just one turn, allowing you to

## THREE OF A KIND

The best three units in *Persona 5 Tactica*



### JOKER

Even though you don't actually have to play as Joker, it's still recommended as his passive ability upgrades all gun damage and his ultimate instantly downs opponents.



### RYUJI

Ryuji's shotgun can be upgraded to ludicrously overpowered levels, dealing huge damage with an incredible range and spread.



### MAKOTO

Makoto starts out strong but with a short movement range, but later upgrades in her skill tree allow her to move several tiles further and still pack a punch.





Combat is reminiscent of the XCOM series.



**ABOVE:** *Tactica* picks up directly after the events of *Persona 5*...

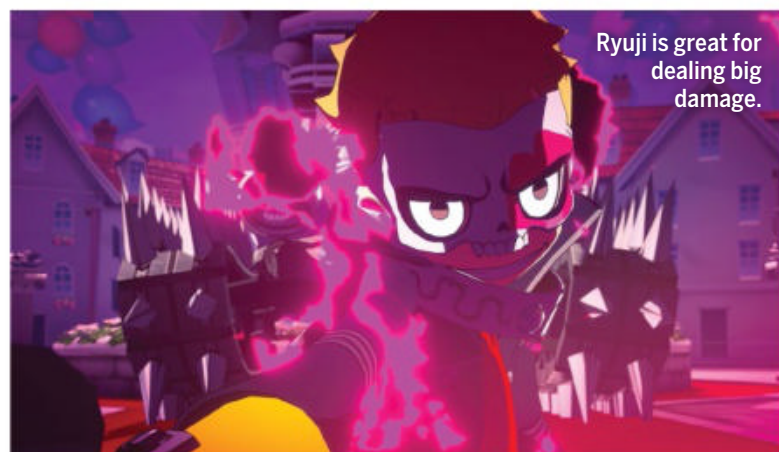
**LEFT:** ...and introduces new characters Erina and Toshiro.



The *Persona* crew love to strike a pose. Vogue!



## Persona 5 Tactical



**RIGHT:** Persona!

**FAR RIGHT:** Positioning of units optimally each turn is crucial for success.

**BELOW:** Chaining moves together never gets old.





effectively wipe out all of the enemy's units before they even manage to get two to three turns of their own.

The fact that your units can move infinitely within their allotted movement tiles before committing to an attack allows for a lot of freedom and experimentation, which in turn gives you the opportunity to find a way out of almost any situation, regardless of how dire things may appear. It also facilitates the use of what may be the most gratifying mechanic to pull off: the All Out Attack. By positioning downed enemies within the triangle formed between your units' positions, you can attack every enemy within said triangle at the same time. Pulling off an All Out Attack feels so rewarding every single time—any time I managed to trap ten or more enemies in one go it was absolutely electrifying.

Chaining up to 15 moves in one turn using only three units never gets old either, particularly because it never feels too easy. Every super-long combo streak felt like a puzzle I had personally cracked, tactically weighing up every angle, rather than just a flashy moment the game had handed me. In fact, the sidequests outside of the main story literally are puzzles in this respect—most of them function as special challenges that require you to defeat up to 20 enemies within just one

turn, helping to hone your instincts for normal battles.

*Persona 5 Tactical* also does an excellent job of keeping combat fresh, introducing new mechanics, enemy types, and powers regularly enough to ensure things stay exciting right up to the final confrontation. Around the midpoint

## Pulling off an All Out Attack feels rewarding every time

in the story, just as I had got a handle on correctly positioning my units at the end of their turns, a new unique enemy was introduced that flings enemy units across the map, suddenly forcing me to think an extra move ahead. Similarly, in the late game, a unit appeared that swapped places with me when attacked, creating a whole new puzzle around taking them out without leaving my allies out of position and surrounded.

### NEW TRICKS

The main story took me about 35 hours to complete, with another 15 on top for side content, and *Persona 5 Tactical* really did keep me on my toes throughout that time. A 50-hour runtime might sound a little short to the average *Persona* fan, but I've even found myself replaying sections to improve my scores, and a robust New Game+ mode gives you more reason to dive back in.

All of this is bolstered by a well considered approach to your party's customization. Each character can now equip two personas at once,

gaining some of Joker's usual flexibility; as each persona type allows you to inflict different status effects, this allows you to have up to six unique ways to control the battlefield in every mission. Personas work much in the same way as they have in previous *Persona* games, the buffs and elemental attacks they confer just giving you more ways to experiment with your strategy in a way that fits just as neatly into a tactics framework as it did in a sprawling JRPG.

You gain even more options through persona fusion, which this time around can be used to create uniquely powerful firearms that spit out even more status effects, giving you a ridiculously large arsenal of tools to play with. On normal difficulty, you will find this expansive arsenal starts to make you overpowered in the late game—but switch over to 'merciless' and you'll get a much more engaging challenge.

### PERSON-A OF INTEREST

I have poured roughly 80 hours into *Persona 5 Tactical*, completing two full playthroughs, crossing off every piece of side content and even completing the persona compendium, and I'm still not tired of its charms. I can offer no higher praise than this: there is nothing left for me to unlock or experience in this game, and yet I'm still playing it, because the core combat is so much fun that improving my scores for every map still feels like a worthwhile endeavor.

We're not short of quality games, so you'd be forgiven for overlooking *Persona 5 Tactical*—but it's far from just another *Persona* spin-off. What P-Studio has created here feels like a genuinely revolutionary take on the genre; a unique mix of tactical gameplay and puzzle-solving paired with what is, without a doubt, the best story I've had the fortune of experiencing this year. Fans of *Persona* should pick it up as soon as possible, but I'd also recommend it to any fan of turn-based strategy, whether you're familiar with the Metaverse or not. ■

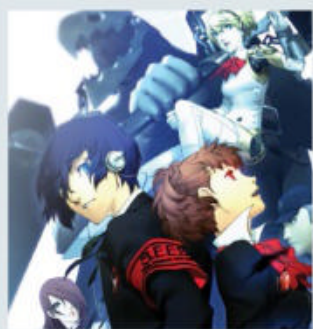
### PC GAMER VERDICT

This isn't just another well polished game in the *Persona 5* line—it just might be the best *Persona* so far.

90

## PERSONAS EVOLVED

Previous series highlights have been iterations on releases



### PERSONA 3 PORTABLE 2006

Originally released for the PlayStation Portable handheld console. Added a playable female protagonist and new difficulty settings.



### PERSONA 4 GOLDEN 2012

As with *P3P*, *Golden* improved on the original release in a number of ways, including battle system changes and new characters.



### PERSONA 5 ROYAL 2019

The version of *Persona 5* to play, with updated graphics, gameplay and story segments, as well as various quality of life improvements.



# TONY HAWK'S PRO DATER

I've fallen head over heels for **THIRSTY SUITORS**

By Abbie Stone

**I**'m having a long overdue conversation with my ex. He deserved a more honest breakup than I gave at the time and so now we're finally talking maturely. Saying that, I'm also slam-dunking a basketball into his face. Oh, and I'm using my thirst taunt to make him lust after me, so my attacks hurt more. Am I the asshole?

You're Jala, fresh from a nasty breakup and heading back to the hometown she abandoned several years ago. It's a narrative-heavy RPG, with a whole conga line of bitter exes waiting to face you. You're barely back in town before one forces you into a turn-based battle. Try not to get distracted by his abs.

You have a basic attack that costs nothing, a series of skills and summons that cost MP, and several taunts that open weak points. We've seen taunts like 'rage' in tons of games, but how about ones that leave the enemy emotionally devastated? It's hard not to giggle when the heartbreak taunt makes your ex burst melodramatically into tears.

## PUNCH DUNK LOVE

Fights are constantly interrupted with verbal confrontations, as your ex calls out your past appalling behavior, and you choose how to

respond. Exchanges can get delightfully catty, but there's plenty of heart in the excellent script too. Jala's dad is a particular highlight. "I can see you're not in the mood for talking," he says, when we join him in front of the TV. "Maybe a nice documentary about the Cold War?"

## Fights are constantly interrupted with verbal confrontations

Every ex encounter is brilliant. One is too timid to confront you directly, so his pet cat becomes a ferocious lion happy to strike you. Diya "exudes punk rock domme energy" and fights with a trio of crystalline backup dancers. Each battle concludes with you making up and deciding what your relationship will be in the future. Frustratingly, sometimes I'd win a fight just as the conversation was getting going. Still, there's nothing stopping you from pulling your punches until you've exhausted all the dialogue. Fights are surreal and cartoonish, anyway, feeling more like numbers in a musical than actual brawls.

## NEED TO KNOW

**WHAT IS IT?**  
An RPG/skate sim/  
cooking game/  
audiovisual treat

**EXPECT TO PAY**  
\$30

**DEVELOPER**  
Outerloop Games

**PUBLISHER**  
Annapurna Interactive

**REVIEWED ON**  
AMD Ryzen Z1, 16GB  
RAM, AMD Radeon  
Graphics (ROG Ally)

**MULTIPLAYER**  
No

**LINK**  
[shorturl.at/vQTU1](https://shorturl.at/vQTU1)

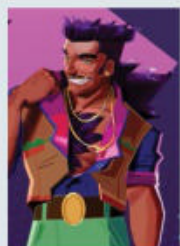
There's some simple cooking minigames, made more entertaining because you're cooking under the critical eye of Jala's mother. She's hilariously snippy, backhanded in her praise no matter how well you're cooking. You can attempt more difficult versions of the minigames to try and impress her, or even risk buttering her up with praise. She described one of my dishes as "I've seen worse" and it felt like finishing *Elden Ring* blindfolded. There's a lovely character arc simmering away in the background of all this cooking too, as Jala gradually gets the confidence to confront this kitchen demoness of a mother.

The skateboarding—oh yeah, there's skateboarding, by the way—is perfectly solid arcadey fun. It's a neat way to get around town and there's even a skate park with a list of challenges. All nice enough, but fairly throwaway. I love how almost every character in the game can be unlocked as a skater, though.

It's all these little touches that make *Thirsty Suitors* special. Tutorial hints are given to you by your Uncle Hinti, a pun so horrible I want to applaud. Every night ends with you falling asleep on the sofa with your dad watching TV, and then he gently piggybacks you up to your bedroom. It's got some of the best LGBTQ+ representation I've seen in a game and isn't afraid to dig deep into the unique difficulties, messy dramas, and outrageous behavior that can make being a part of this community so wonderful despite being exhausting. Jala may have been dreading returning to her hometown but I'm glad she made the trip. She's ended up starring in one of my favorite games of the year so far. ■

## THIRST TRAPS

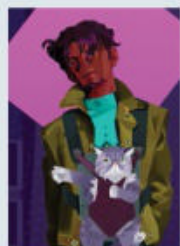
The six exes you'll have to make nice with, or not



**SERGIO**  
Rock-hard abs.  
Also, dumb as  
a rock.



**DIYA**  
Spacebunned  
beauty who's  
better off  
without you.



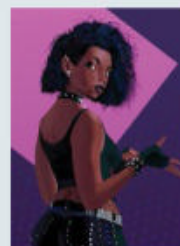
**IRFAN**  
We're amazed  
this pushover  
can even  
stand up.



**BRUNO**  
Charm  
personified.  
Whoa, charm  
is ripped.



**ANDILE**  
BFFs with  
your most  
powerful ex.  
Uh-oh.



**TYLER**  
You've broken  
her heart  
multiple times  
you BEAST.

PC GAMER

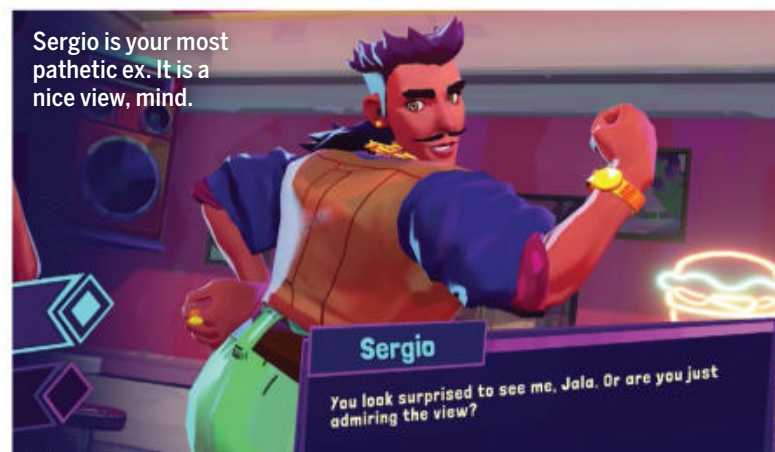
VERDICT

A heartfelt and hilarious couples therapy session, beautifully disguised as a stylish RPG. A gem.

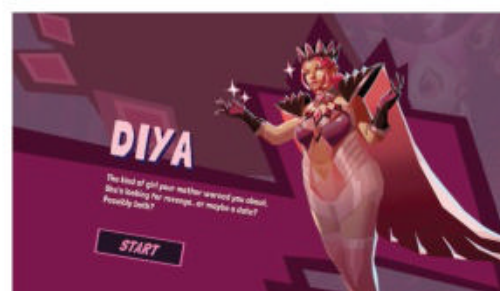
84



Thirsty Suitors



Sergio is your most pathetic ex. It is a nice view, mind.



**FAR LEFT:** Watch out for the mean teens in the skatepark. They're merciless.

**LEFT:** Each ex gets a joyously overblown entrance.



Irfan

Wow. I shouted at you. And actually expressed my feelings. And the world didn't end.

Irfan here was voted most eligible bachelor by the town's aunts. Bless him.



# DRAGON'S DOGMA

**LIKE A DRAGON GAIDEN** is a condensed adventure that brings a new purpose for Kiryu

By Phil Savage

**T**he *Like a Dragon* series—*Yakuza*, as it was previously known—has always been economical with its reuse of assets and features. Even major new releases recycle old locations and minigames alongside whatever new features they also add. *Like a Dragon Gaiden: The Man Who Erased His Name*, though, is not a ‘major’ release. It’s a side story—one that bridges the gap in protagonist Kiryu’s story between *Yakuza 6* and the upcoming *Like a Dragon: Infinite Wealth*.

As a result, it’s shorter and less ambitious than a main series entry. There’s very little here that feels new. The action is predominantly in Sotenbori—the series’ take on Osaka’s Dotonbori district, used frequently in previous games. The minigames are a tried and true collection of *Yakuza* classics, from mahjong to karaoke to the return of pocket circuit racing. There is one new location, The Castle—an absurd offshore getaway for rich hedonistic assholes. In practice, though, it’s just a hub for the battle arena and a returning handful of gambling minigames.

Damn it, though, it still works. The nature of the series—its focus on story and character; on dramatic plot and absurd substories—makes every

game something more than the sum of its distractions. A returning location is a chance to see how the world has changed since your last visit. A reused minigame proves a welcome break as the story’s tension continues to build. It all feels very comfortable, especially now that the mainline series has moved onto a new lead protagonist and a new turn-based combat system.

## Kiryu’s return means we’re back to the classic brawling

### THE DRAGON RETURNS

Kiryu’s return means we’re back to the classic brawling that was once a staple of the series. And here, at least, there are some new toys to play with. Kiryu can switch between two combat styles: *Yakuza* and *Agent*. The former is your traditional

### NEED TO KNOW

**WHAT IS IT?**  
A *Yakuza* side-story, set during the events of *Yakuza: Like a Dragon*

**EXPECT TO PAY**  
\$50

**DEVELOPER**  
Ryu Ga Gotoku Studio

**PUBLISHER**  
Sega

**REVIEWED ON**  
AMD Ryzen 7 3700X,  
32GB RAM, Nvidia  
GeForce RTX 3080Ti

**MULTIPLAYER**  
No  
**LINK**  
[hshorturl.at/InC03](https://hshorturl.at/InC03)

powerhouse moveset—Tiger Drop and all—using the series standard combos of punches, kicks and street props turned weapons. The latter is more nimble, but also loaded with gadgets. Hold the grapple button, for instance, and you’ll fire out Spider, a wrist-mounted rope that can lasso enemies to be flung around or reeled in for a follow-up attack.

Not all of the gadgets are particularly useful. Firefly—a cigarette that is also a bomb—just isn’t very effective. Deploying it leaves you vulnerable to attack, and the explosion itself is weak, even upgraded. The best of the bunch is Serpent, aka the rocket shoes. By holding the run button, you can glide across a street fight knocking down enemies in your path. It looks ridiculous and it’s also hilariously overpowered, capable of clearing out scores of weaker enemies. In the final missions, as the game throws increasingly absurd numbers of grunts at you, I did a lot of damage by skating back and forth through the pack, only switching to *Yakuza* style once I was down to a more manageable number of beefier opponents.

### KIRYU, KAZUMA KIRYU

Why is Kiryu now the owner of an arsenal that even James Bond would think is a bit much? It’s because he’s effectively a secret agent now—a man indentured to a shadowy political faction as part of the deal he struck at the end of *Yakuza 6*. The story of *Like a Dragon Gaiden* runs parallel with *Yakuza: Like a Dragon*, explaining what he’s been doing since he faked his own death, and—for the most part—it’s a triumph.

It’s a shorter story than usual—just five chapters—but it achieves a lot in that time thanks to a supporting cast that remains nuanced and intriguing throughout. Kiryu’s obligation to the Daidoji Faction is a particularly fascinating wrinkle, testing his sense of honor and the promise he made

## THROUGH THE DRAGON AGES

Previous top titles in the *Yakuza: Like a Dragon* series



**YAKUZA 0**  
Arguably, the best game in the series. Set in 1980s Japan, both in Tokyo and Osaka. A gem.



**YAKUZA: LIKE A DRAGON**  
A ridiculously big JRPG that will keep you entertained for hundreds of hours.



**YAKUZA 5**  
Play as five different characters as they chase their dreams in five different Japanese cities.



**YAKUZA KIWAMI 2**  
Kazuma Kiryu faces off against fierce rival clan dragon, Ryuji Goda.





## Like a Dragon Gaiden



**FAR LEFT:** Combat is a chaotic series of kicks, punches and hitting dudes with bins.

**LEFT:** Shiny puffer jackets and shades at night? Boy band!





# REVIEW

## Like a Dragon Gaiden



**RIGHT:** Now that's a reverse roundhouse kick!

**FAR RIGHT:** Kiryu is a master of getting explosive results.

**BELOW:** What do you mean you gave away my copy of PC Gamer magazine?!





» against his sense of honor and the bonds he still holds dear. It also forces him to go by a new codename, Joryu, pretending he's dead even to people who very obviously know exactly who he is.

*Gaiden's* greatest strength is that it persuaded me that *Yakuza 6's* unsatisfying lack of a definitive conclusion was actually the right move. That, as a character, Kiryu still has more to offer than just a cameo in someone else's story. The heartbreaking emotional gut punch of its conclusion means that, for the first time in a while, I'm excited to see what's next for the old dog and his new tricks.

### FIX ME A FIGHT

Away from the story, *Gaiden* gives structure to exploration through the Akame Network—named after the Sotenbori fixer you meet after arriving in the city. This is how *Gaiden* handles substories—called requests—and how it rewards you for exploration. Completing requests, or ticking off items from the completion list, gives you points. You need both points and cash to upgrade your skills, and any spare points you have can also be spent in Akame's shop. It's a good structure, especially for a

smaller game such as this—making everything you do feel like it ties directly to your progression. I do wish there was more done with the substories, though. There's only around 24 requests, and of them only a handful feel as memorable as Kiryu's sidequests in past games.

The battle arena has also been upgraded with the addition of Hell Team Rumble, a team-based mode that requires you to gain allies. As in previous clan builder modes, you can recruit a mixture of new and old faces—yes, even Gary

Buster Holmes. It's a light twist on a *Yakuza* classic, but the natural rhythm of fighting and leveling is easy to lose yourself in. As I said before, it's all very comfortable.

Arguably I'm damning with faint praise, but I do appreciate that *Gaiden's* scope has led to what feels like more manageable goals. Despite having played every *Yakuza* game between 50 and 100 hours, I am not a series completionist. I'll go through the story, the substories and the big side activities. I'll even spend an hour or ten playing mahjong or koi-koi to unwind. But I'm done long before I'll finish the battle arena or any of the series' other major time sinks.

## Kiryu still has more to offer than a cameo in someone else's story

## WHO IS KAZUMA KIRYU?

Meet Like a Dragon Gaiden's protagonist

### 1 TATTOO

Kiryu has a dragon tattoo on his back because, you know, he's a dragon.

### 2 SUIT

Kiryu loves nothing more than being sharply dressed in his outdated gray suit.

### 3 TECHNIQUE

Kiryu has developed his own explosive Dragon of Dojima fighting style.



## FINITE WEALTH

*Gaiden* feels like a sample platter of series classics. After 25 hours I've already cleared the story, most of the substories, and a good chunk of the arena battles. I'm leveling up my team in preparation to take out the four kings—a side story that pits you against the very best of the arena's fighters. I'm working through pocket circuit races almost despite myself. Even condensed, there's enough here to keep me busy until *Infinite Wealth* releases in January.

For the record, *Infinite Wealth* looks like it will be much, much larger than *Gaiden*, reinforcing the idea that this installment is very much a side story *Yakuza* snack to keep fans happy until early next year. *Infinite Wealth* will see series' regulars Ichiban Kasuga and Kiryu himself brought together by the hand of fate (or perhaps something more sinister) in an RPG adventure so big it spans the Pacific, with action taking place both in Japan and in Hawaii. I'm particularly looking forward to the smorgasbord of Hawaiian shirts that will be on display. The thing in though, when you see the pre-order price for *Infinite Wealth* is \$69.99, *Gaiden's* price point rises to the fore.

It does have to be noted that, at the end of the day, this is a \$50 release that, ultimately, offers much less than any other game in the series. In isolation, it's a reasonable price for a game that I will probably put well over 30 hours into, but if you're a newcomer, there's better value elsewhere. For \$10 more you can get *Yakuza: Like a Dragon*, an absurdly expansive JRPG that I played for over 100 hours. For \$20, you can get *Yakuza 0*, arguably still the highpoint of the series and the perfect entry point for new players.

As a fan, though, I don't really begrudge *Gaiden's* price or its compromises. It still offers tens of hours of entertainment and, most importantly, it's a compelling new chapter for the series' original protagonist. If you're at all invested in Kiryu Kazuma's story, it's damn near essential. ■

PC GAMER

VERDICT

*Like a Dragon: Gaiden* does little new, but its story is fascinating and heartbreaking in equal measure.

70



# A SONG OF ICE

**SONG OF NUNU** is a heartwarming adventure in LoL's universe

By Mike Stubbs

**D**on't be fooled by the name. While the titular Nunu is an important part of this adventure, the true star is his yeti companion Willump. Within minutes of meeting the duo you'll want to protect Willump with your life, even if you've never met any of them in *League of Legends* before, and he quickly becomes the star of the show. When Willump isn't on screen, you will always be wondering where he is.

*Song of Nunu: A League of Legends Story*, is the latest in Riot's series of games to expand the *LoL* universe, this time taking the lovable twosome and dropping them into what the developers call a story adventure, presumably due to the lack of action.

They embark on a journey across the icy Freljord to find the heart of the blue, a mysterious power that Nunu believes will reunite him with his mum, but the big baddie Lissandra believes will stop a potential apocalyptic event, which is a reasonable motive. It's all explained in simple terms, meaning you don't have to have any prior *LoL* knowledge to enjoy it.

The overarching story isn't all that important as it's just an excuse to tag along with Willump and Nunu and experience their infectious bromance. Nunu is a talkative young kid while Willump is his giant pet who communicates through grunts, actions and body language, but that's all he needs to convey how he is feeling, what he wants you to do, or even make jokes.

His cheeky personality is what first makes you like him, but over time his bond with Nunu is what really shines through and makes him such a lovable character, leading to some heartbreaking moments when things go wrong. The brilliant soundtrack only adds to the emotion this relationship will make you feel.

As you travel across the surprisingly varied landscapes for a game that almost entirely takes place in a frozen tundra, you'll switch

between controlling Nunu, who can access tighter areas, climb smaller ledges and do some magic with his Svellsongur flute, and Willump who takes care of combat, larger platforming areas and some sledging style sections where he becomes the sledge. When controlling just Nunu, Willump will often run ahead and do his own thing, adding to his personality rather than just having someone follow whatever you do.

Platforming isn't difficult outside of a few instances of irritating camera angles tricking you, and combat is very basic to the point you can usually button mash attacks, occasionally dodge, and you'll never

**Nunu is the talkative young kid while Willump is his giant pet**

## NEED TO KNOW

**WHAT IS IT?**  
An adventure game featuring *League of Legends* champions Nunu and Willump

**EXPECT TO PAY**  
\$30

**DEVELOPER**  
Tequila Works

**PUBLISHER**  
Riot Forge

**REVIEWED ON**  
Intel Core i7-6700, 16GB RAM, Nvidia GeForce GTX 1070

**MULTIPLAYER**  
No

**LINK**  
[songofnunu.com](http://songofnunu.com)

lose. Some of the puzzles do require a bit of thought, but with voice lines to help or Willump literally pointing to the solution after a while you're never going to be stuck. It's fun for the most part, and with a short six-hour playthrough it doesn't quite hit the point of becoming repetitive, but any longer and it might start to.

## WHERE'S WILLUMP?

However, at one point the game takes the entertaining bromance between the two and the decent if somewhat basic formula you have become used to and decides to throw it all in the bin. Nunu and Willump get separated, completely removing the interactions that are the undoubted highlight, and forcing you to play some stealth sections. They aren't the worst-offending forced stealth sections you will ever see, but compared to the rest of the experience this portion really drags. The inevitable reunion leads to some memorable moments, but cutting this down to just one small area of stealth would have made it more palatable.

It was actually this section that made me realise just how important Willump is. Without him, *Song of Nunu* just feels bland. When you aren't on his back and controlling what he does your eyes will constantly be darting in his direction to see what antics he's up to. The interactions between the two are what can distract you from the easy platforming, as your attention is rarely fully on what buttons you need to press. Willump is the ultimate distraction, and it's him and his relationship with Nunu that make this a memorable experience that can conjure up some genuinely emotional moments. ■

## YETI ANATOMY

*What makes Willump the perfect companion*

**1 PERSONALITY**  
A loveable face and cheeky personality make him incredibly entertaining

**2 STRENGTH**  
Four strong arms are perfect for pulling himself and Nunu around the Freljord.

**3 DURABLE FUR**  
A tough outer layer makes combat easy and turns him into an effective sledge.



## PC GAMER VERDICT

*Song of Nunu* is a tale that's difficult not to love, but it's hampered by a lack of challenge and forced stealth.

**73**

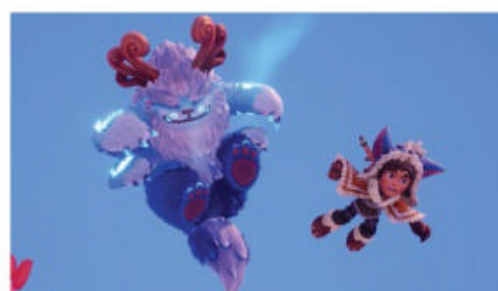




The lovable duo often have a dance to Nunu's Svellsongur.

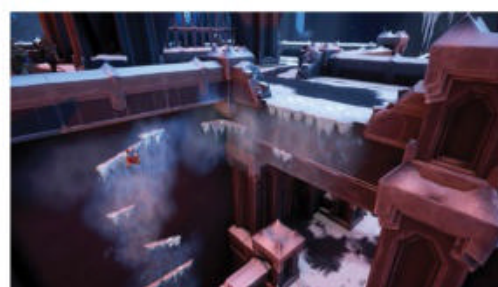


Despite all the ice, there's a lot of colour here.



**LEFT:** You can finish enemies off with cinematic finishers.

**BELOW:** There are some beautiful locations in the Freljord.





# FAILED SAVE

**WARHAMMER: AGE OF SIGMAR: REALMS OF RUIN** is trapped in the deployment zone

By Noah Smith

**R**ealms of Ruin, an overly simplistic RTS that focuses on low-unit-count skirmishes, definitely evokes the spirit of Age of Sigmar, which is unfortunately the worst version of Warhammer. It's far more forgiving than its grandiose Old World counterpart, *Total War: Warhammer*, but only a fraction as satisfying or interesting to play. Clumsy movement and a baffling hands-off approach to combat consign *Realms of Ruin* to the ever-growing graveyard of mediocre Warhammer games.

Aesthetically, *Realms of Ruin* looks like a real game of Age of Sigmar: Sparse smears of terrain and wide open battle maps capture the too-large 6x4 foot play space of the wargame, and you'll be fielding armies that are roughly the same size and composition as those found in AoS's army books. The narrative centers on a beaten-down Dawnbringer Crusade regiment of the Stormcast Eternals, invading the death and destruction-laden realm of Ghur to secure a powerful blah blah blah; if you've even glanced at fantasy story once in your life you can figure out the rest. The biggest issue with *Realms of Ruin* is fundamental to Warhammer: Age of Sigmar—the

rebooted fantasy setting of the Mortal Realms is exceedingly dull, especially in contrast to the visually stunning Old World of the *Total War* games.

## OLD WORLD BLUES

For those unfamiliar with the difference between the Old World and the Mortal Realms, imagine if everything you like about *Total War: Warhammer* got sucked into a portal (this really did happen in the lore) and then a

wizard turned everyone who ever lived into a *League of Legends* champion. It's so high gloss, so bereft of any of the characteristic Warhammer edge and grit—if Warhammer Fantasy/40K are punk and death metal, then Age of Sigmar

**Mission objectives are varied and offer unique twists**

## NEED TO KNOW

### WHAT IS IT?

A casual RTS based on Warhammer: Age of Sigmar

**EXPECT TO PAY**  
\$40

**DEVELOPER**  
Frontier Developments

**PUBLISHER**  
Frontier Developments

**REVIEWED ON**  
AMD Ryzen 7 5700G,  
32GB RAM, AMD  
Radeon RX 6600

**MULTIPLAYER**  
Yes

**LINK**  
[aosrealmsfruin.com](http://aosrealmsfruin.com)

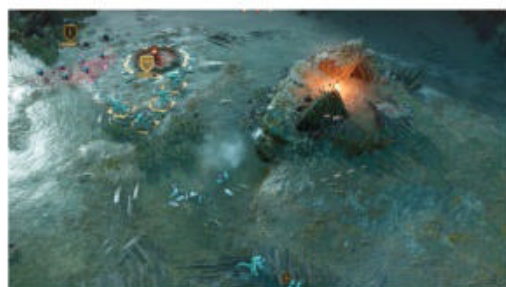
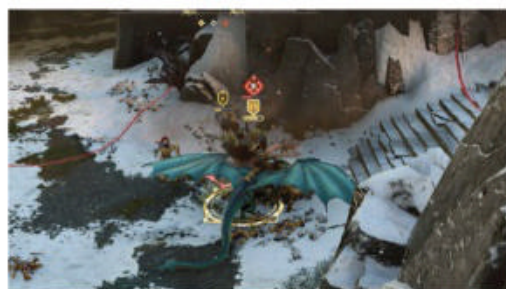
is Imagine Dragons. This is still the case with *Realms of Ruin*, especially in contrast to *Darktide* and *Total War: Warhammer III*, games that soak you in rich atmosphere.

The campaign is serviceable, when not bogged down by atrocious technical issues—more than once I finished a mission only to be hit with a full system crash that erased all my progress. Mission objectives are varied and offer twists on the 'take and hold' gameplay structure, like having to simultaneously defend three awkwardly positioned ritual sites from waves of incoming ghosts, or racing to dominate a map's objectives and set up magic mortar sites to bomb a convoy.

It's an inoffensive modern RTS tutorial campaign, but progress-erasing crashes and a boring narrative where you can see the ending from a hundred miles away makes *Realms of Ruin* tedious and frustrating to play alone.

## A LOSING BATTLE

*Realms of Ruin* takes clear inspiration from 2009's *Warhammer 40,000: Dawn of War II* (one of the best Warhammer games), but confuses



**RIGHT:** The Stormcast Eternals are more than a little similar to 40K's Space Marines.



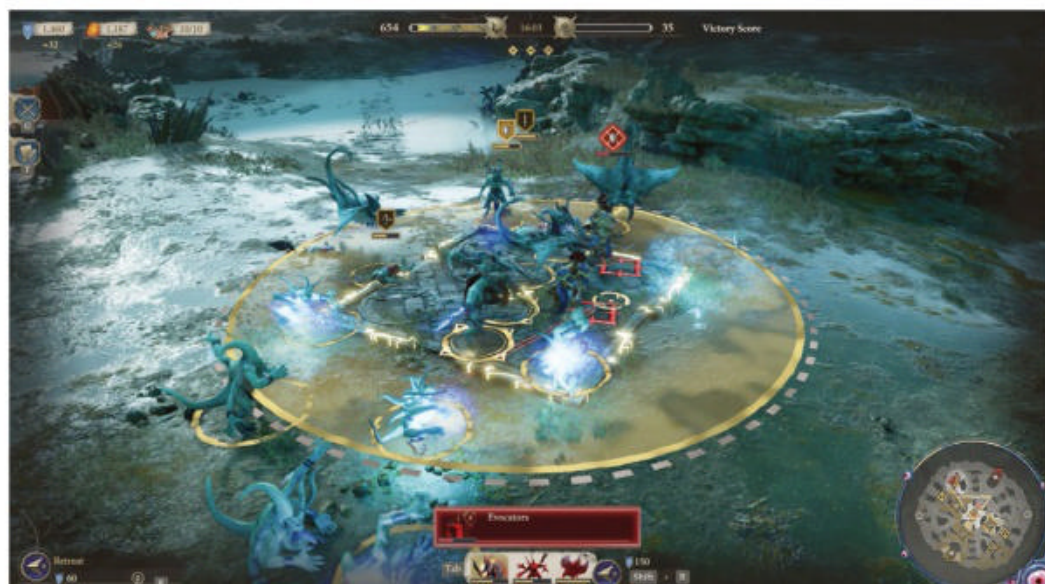


# Warhammer: Age of Sigmar: Realms of Ruin



**TOP RIGHT:** Strategies often degenerate into mobbing units onto the objective.

**ABOVE:** Multiplayer maps are symmetrical, lane-based and lacking in variety.

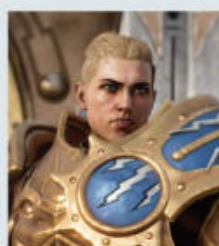


that game's successes at streamlining with oversimplification: Where *Dawn of War II*'s combat was massively scaled down from most RTSes, the limitations on army composition gave greater weight to the choices you made when progressing through your faction's respective upgrade tree. Smaller maps and caps on unit recruitment made the choice between melta and plasma guns feel much more meaningful—bad unit builds could spell defeat for your forces within the first ten minutes. In stark contrast, *Realms of Ruin*'s upgrade system brings no such tension or planning to the battlefield, with upgrades instead being barely noticeable 'pick one' increases in damage or defense. It's especially frustrating how crucial and simultaneously useless these feel as a result of the game's other flaws.

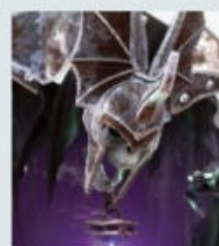
Combat borrows an old mechanic from Warhammer's tabletop game that ends up a poor fit for an RTS: once two units lock blades, neither side can disengage until one is either defeated or retreats, an order that forces your survivors to leg it back to base and heal up. Given that you only really have agency over when your unit abilities are activated and what upgrades they head into the fray with, I found that I barely had any real control over the course of a battle. Two armies charging in *Realms of Ruin* winds up looking more like a tavern brawl at the

## HEROHAMMER

Meet the leaders of *Realms of Ruin*'s four factions



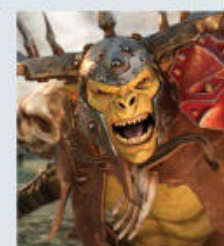
**SIGRUN**  
Duty-bound commander of the Stormcast, currently questing for a magic relic.



**LORD GLOAM**  
Ghostly avatar of the Lord of Death, currently holding onto said magic relic.



**STRYLKA**  
Disciple of Tzeentch and wannabe Daemon Lord, seeding deception with Chaos magic.



**KILLABOSS**  
Chieftain of the KruleBoyz orcs. Just looking to crack some skulls and have a good time.



Warhammer: Age of Sigmar: Realms of Ruin



» renaissance fair due to some wonky unit pathing that will see your forces literally trip over each other. My units meant to tank damage would often get shunted out of the way by their glass cannon counterparts as they bolted to the front, eager to catch a hammer blow to the face.

Since wounded units' only realistic avenue of healing is hanging out back at spawn, a significant amount of my playtime was dedicated to managing a high fantasy medical caravan, constantly shuffling my pawns back to the frontline. This often resulted in matches without much back and forth, where having even a fraction of my forces wiped out concurrently foretold a long, drawn-out defeat.

The retreat ability key is also one of the most punishing miss-clicks I've experienced in an RTS—in multiplayer sessions with other PC Gamer writers, all of our leaders were constantly fleeing the battlefield by mistake. Having some kind of timer or cancelable warm-up animation would have been preferable to having our generals immediately heel-turn and sprint back to base every couple of minutes.

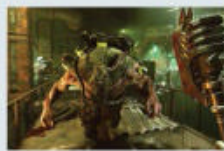
**TOP LEFT:** There's no such thing as too many Flamers of Tzeentch.

**RIGHT:** The army painter includes most of the recent Citadel fantasy paints.



IN THE GRIM DARKNESS OF THE FUTURE...

There is only PC gaming better than Realms of Ruin



**WARHAMMER 40,000: DARKTIDE**  
After a year of patches this co-op shooter is now slick and tons of fun.



**WARHAMMER 40,000: ROGUE TRADER**  
A story-rich 40K-themed RPG in which you can explore space.



**WARHAMMER 40,000: BOLTGUN**  
An explosive boomer shooter that really makes you feel like the a killing machine.



**WARHAMMER 40,000: SPACE MARINE 2**  
Well, it's not out yet, but from what we've played this is going to be fun.

TWILIGHT OF WAR

When our armies managed to stay on the field, battles mostly played out as incoherent mobs of gold and green smashing each other to bits. There is



## Warhammer: Age of Sigmar: Realms of Ruin

some avenue for more strategic play—you can capture sites that let you build a single tower that boosts one of your army's attributes. However, prioritizing these tower sites over the game-winning conquest objectives always felt like self-sabotage, mostly due to the insanely long time it takes to capture one—it's always more efficient (and way less fun) to cram a bunch of cheap basic units onto a game winning objective and buff them with a character than it is to try and play with all the cool toys available to your faction.

*Realms of Ruin* is almost paradoxical—why should I care about upgrades when the AI pathing will break all my formations and make tactical play all but impossible? And why should I care about strategy and tactics when I have so little ability to influence combat? After a dozen hours with *Realms of Ruin*, what I found is that I just didn't care about anything.

Armies do at least retain their tabletop flavor, my runaway favorite being the forces of Tzeentch, the Daemon of Change. Their emphasis on streaming ranged attacks, screening with cheap cultists and heavier daemons, and an unforgiving economy that has you racing to recruit Flamers of Tzeentch as early as possible. Two of the four factions, the horde-like Nighthaunt of Nagash and the tricky Uruk-hai-inspired Kruleboy orcs didn't grab me in quite the same way—each

faction favors a specific playstyle, and *Realms of Ruin*'s awkward movement mechanics did these unorthodox armies, which rely on tight formations and ability micro-management, no favors.

## REALMS, RUINED

Even Warhammer's lamest setting still has some cool stuff going on, like the crunchy combat animations—Stormcast Eternals, who are quite literally space marines from Warhammer 40,000 but with magic, throw their whole bodies into their hammer and axe swings, tossing out elbows and fists on the backswing. The Nazgul-esque Nighthaunt are a

vexing fog of death essence, cloth, and blades, capturing the sweeping motions of the fantastic tabletop sculpts. My favorite was far and away the Lord of Change, a massive daemonic cockatrice that casts

waves of iridescent magic in tsunami-sized waves.

*Realms of Ruin* also has an army painter—there's options for all of the official alternate army schemes featured in each respective factions' battletome, but you can also make your own schemes, complete with the full range of colors from the Citadel paint line. I wish *Realms of Ruin* took some influence from PC skirmish game *Moonbreaker*, though. Options to add texture, shading, highlighting and weathering would make for a more authentic

recreation of the tabletop wargaming experience.

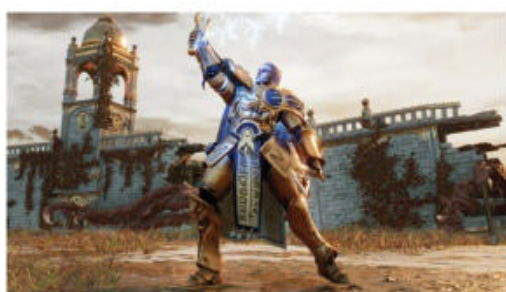
I found myself most engaged by the Conquest mode, a procedurally generated campaign that links AI skirmish battles together across a campaign map, with randomized modifiers to content with. While the ones I encountered weren't anything outrageous, modifiers like +50% movement speed & instant recruitment times papered over *Realms of Ruin*'s shortcomings. Unlike the campaign or multiplayer, Conquest gave me freedom to experiment with new unit builds and army compositions. The most fun I had with the game was seeing how far I could get with an 'Oops, all Pink Horrors!' army list (not far at all).

Zoomed out from its meticulous combat animations, *Realms of Ruin* is an awkward, clumsy RTS that's ultimately devoid of the characteristic grim darkness that's long served as Warhammer's stylistic foundation. The bizarre combat mechanics and baffling balance tested my patience as a hardcore Warhammer fan, which means I'm very used to having my patience tested. For someone wanting a casual Warhammer RTS, start an Immortal Empires campaign in *Total War: Warhammer III* and set the difficulty to easy. ■

## PC GAMER VERDICT

*Realms of Ruin* is a clumsy RTS that's devoid of Warhammer's characteristic grim darkness.

55

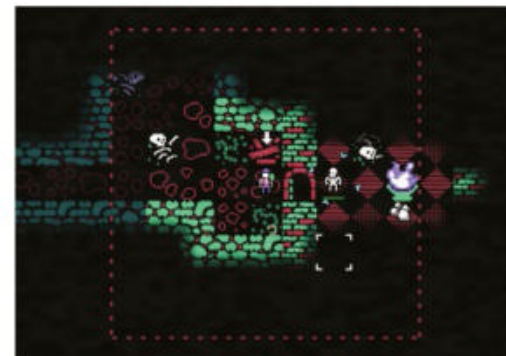
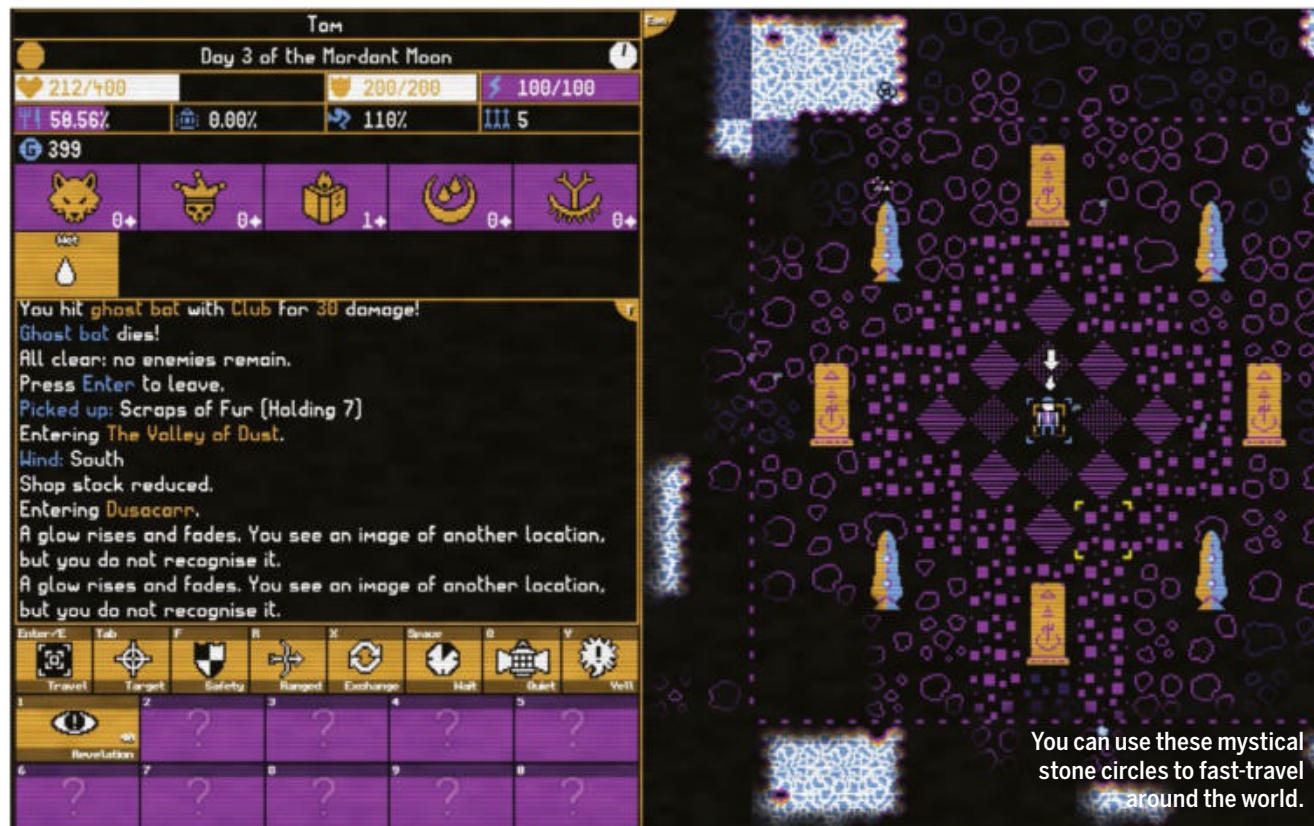


**RIGHT:** Brutal animations make the drudgery of combat bearable.





COOL TITLES FOR NO CASH by Tom Sykes



# DREAMLAND

Ringing in the changes with **MOONRING**

**T**he gaming landscape's been crying out for a game like *Moonring*: a retro-styled CRPG with a fascinating world and roguelike dungeons to tackle, but without the heartbreak of full permadeath. Die in a *Moonring* dungeon and you'll merely return to its entrance, albeit with all of your work undone. You can either enter it again—setting foot in a newly generated maze—or wander off to another part of the (fixed) overworld.

It's a satisfying compromise, retaining much of the tension of true roguelike dungeons, while couching them in a more forgiving CRPG. *Moonring* evokes the early *Ultima* games, with its top-down overworld filled with dungeons and towns, and in the detective work you'll need to put in to get anywhere.

This is a world with an interesting mythology, given the stock medieval fantasy similar RPGs tend to trade in. The realm has five moons and five gods, while the populace is divided into Dreamers (basically, normal folk) and the Dreamless, who are candidates for becoming the next Archon: the human representative of the gods.

Being a Dreamless yourself, adventure is obviously on the cards,

**Cryptic notes and snippets of conversation are how you'll learn anything**

and it arrives in the form of a cryptic note from your late father. Cryptic notes and snippets of conversation are how you'll learn anything in this delightfully old-fashioned game, which trusts you to figure out where you need to go next. Mainly you do this by talking to people, using a parser system to manually type conversation topics, before consulting the in-game notebook for a handy list of the things you've learned.

## ETERNAL RING

In the old days, you would need a physical notebook and have to type the same things repeatedly, but *Moonring* handily modernizes those issues away. It helps out by offering to auto-complete known topics as

## NEED TO KNOW

**WHAT IS IT?**  
An old-fashioned CRPG  
by Dene Carter,  
co-creator of *Fable*

**EXPECT TO PAY**  
Free

**DEVELOPER**  
Fluttermind, LLC

**PUBLISHER**  
Fluttermind, LLC

**REVIEWED ON**  
Intel Core i7-10750H,  
16GB RAM, Nvidia  
GeForce RTX 2060

**MULTIPLAYER**  
No

**LINK**  
[bit.ly/MoonringGame](http://bit.ly/MoonringGame)

you type them, and by suggesting newly revealed ones via floating thought bubbles. Sure, these are issues that modern RPGs streamlined away decades ago—but with objective markers and quest logs, you might argue they have gone too far. *Moonring*'s additions are modest, and they keep the retro spirit alive.

The game sings, for me, in its dungeons, which are atmospheric, turn-based delves into the unknown. It really is similar to a roguelike in that you're moving turn-by-turn, revealing the map and stepping onto traps, before monsters notice your presence and make a beeline for you.

Enemies whittle down your Poise meter before they eat into your health. It's very easy to die in *Moonring*, but you always feel like you had a chance to survive—just one of the many ways this expansive game brings the old-fashioned CRPG into the modern era. ■

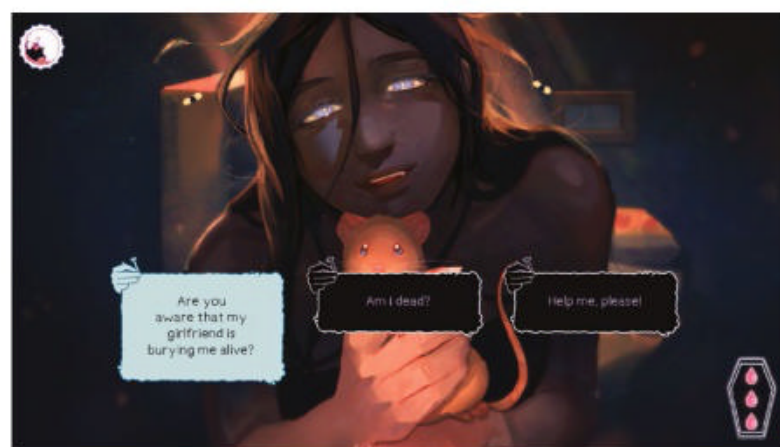
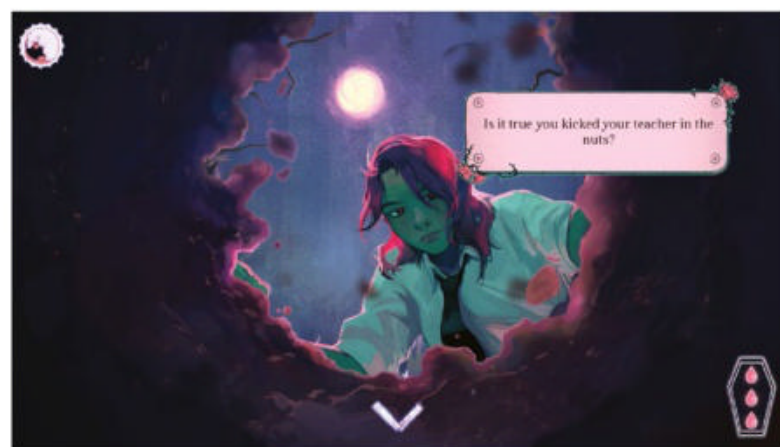
## PC GAMER VERDICT

Authentic, forward-thinking, and somehow free, *Moonring* modernises (sparingly) the classic CRPG.

**85**



BELOW: The girlfriend that's burying you alive.



#### NEED TO KNOW

**EXPECT TO PAY**  
Free

**DEVELOPER**  
Angela He et al

**LINK**  
[bit.ly/StopBurying](http://bit.ly/StopBurying)

## UNDERGROUND

Rats abound in **STOP BURYING ME ALIVE, BEAUTIFUL!**

**B**eing buried alive is not normally something you get to enjoy more than once, but you'll want to at least replay the ending of this unusual visual novel that begins with your girlfriend covering you in dirt. See, she thinks you're dead, and it's surprisingly difficult to convince her you're not.

All you can do is speak to her—an action one wouldn't ordinarily attribute to a corpse—but, alas, she's having none of it, as you pick from dialog options to assert your aliveness. The grieving woman sees the act of burying you as a cathartic, healing experience, and hey (apart from your imminent death), perhaps she has a point. Things weren't so great between you—but maybe you can change things, if she doesn't murder you first. Or if you don't choose the game's other love interest:

the peculiar woman living in the hole next to yours.

Whenever the conversation sputters to a halt above ground, you need to duck your head under the earth to chat with the lady living in the plot next to yours. But what's she doing there? How is she living there? And does she even exist? *Stop Burying Me Alive, Beautiful!* isn't terribly interested in offering concrete answers, but she represents giving up on your above-ground girlfriend—so, if you choose to stay with her, you can live in a hole and stroke rats and play cards all day.

Would you like to live with rat girl? Or would you rather not be buried alive? The choice is yours, as you swivel your head above and below ground in this wacky visual novel that takes a good idea in an unexpected direction. ■

70

## DUEL QUEST

Enjoy a disco-themed deckbuilder in **DANCING DUELISTS**

**S**omething good has come out of the recent Unity pricing drama: a new game by *Slay the Spire* devs Mega Crit. Made during an in-house game jam to test the waters of the Godot engine, *Dancing Duelists* is another deckbuilder—but that's the only thing the games have in common.

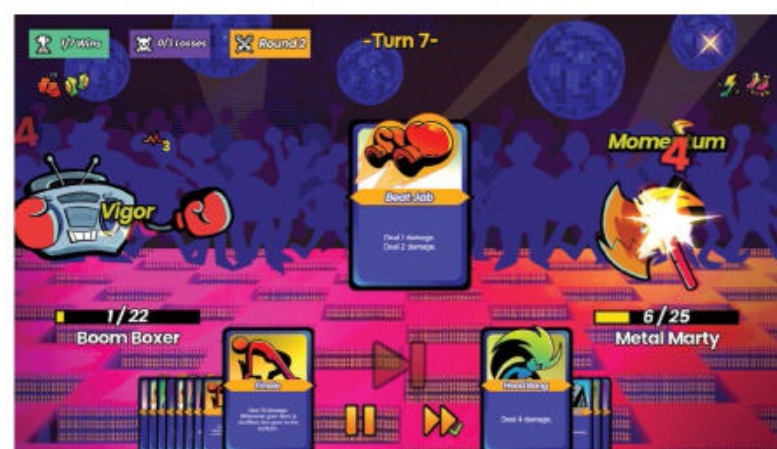
There are no spires to ascend here, or even pits to climb down. Instead, it's a *Street Fighter*-style tournament. Beat seven opponents to win, but if you lose more than two matches, it's game over. Between each battle you will, of course, earn cards and trinkets to embiggen your deck. Build a synergy and soar to victory, or pile on cards and hope for the best.

Hoping for the best is very much par for the course, as once the duellists are locked in the dance-off, you can't intervene. Your character

automatically plays the next card from their randomly shuffled deck, and then your opponent plays theirs.

After so many years of copycats that have largely remained faithful to the *Slay* formula, it's a delight to finally play an actual Mega Crit follow-up—and to have it deviate so strongly from the mould. The on-the-fly synergizing of *Slay* remains intact, only on a smaller scale, and at a much faster pace thanks to the hands-off battles. There are many more characters to choose from, compared to the four in *Slay*, and while their differences aren't nearly as stark, there are some fun character designs and deck quirks to get to grips with. All in all, this is a bit of a belter. A comparatively light game—it was made in only three weeks—but one that proves Mega Crit has still got it. ■

BELOW: It's impossible to remove cards from your deck.



#### NEED TO KNOW

**EXPECT TO PAY**  
Free

**DEVELOPER**  
Mega Crit

**LINK**  
[bit.ly/DancingDuelists](http://bit.ly/DancingDuelists)

82





Something about this feels like after-school detention for men in their 40s.



# COLE AUTHORITY

Aggressively seeking the truth in **LA NOIRE**

**M**ost humans find the uncanny valley terrifying. Unlike animals, who accept anything that resembles them without issue, many of us find human-like appearances upsetting. There's a theory (by which I mean a post I saw on Reddit) that suggests an evolutionary reason for this. That is, at some point in our history, we developed a fear of anything that looked human, but wasn't...

Or perhaps, somehow, our ancient ancestors just played *LA Noire*. Lauded at the time of release for being the pinnacle of realistic, emotive facial animation, the reality is somewhat different. There are times when it's massively impressive, especially when it captures the tired jowliness of the LAPD's finest. But occasionally, it feels like projections of human faces projected onto impeccably-dressed mannequins. More than this, the central conceit of the game's interactions—studying faces and reading mannerisms to spot deception—either doesn't work, or is so laughably clumsy to make the game feel like a pantomime retelling of the Black Dahlia case. “He’s behind

you! No really, he is.” There are only so many furtive sideways glances you can see before it starts to feel like a Neil Breen movie.

For most of the game, this is a problem present only in the extended cast of sweating criminals and deceitful femmes fatale. The performances of the central cast are crisp, relatable, and humane. There are still times, however, when the binary nature of the interrogations leads to

**Simply not that good at being a detective game**

bizarre and hilarious idiosyncrasies. One minute Phelps is calmly scrawling in his magic notebook, the next he’s tearing his vocal chords, screaming at a cowering old lady. It’s part of a bigger problem that makes *LA Noire* less satisfying than it deserves to be: it’s simply not that

## NEED TO KNOW

**WHAT IS IT?**  
If Frogwares made a Dragnet game with an unspeakably huge budget

**EXPECT TO PAY**  
\$18

**DEVELOPER**  
Team Bondi

**PUBLISHER**  
Rockstar Games

**REVIEWED ON**  
Intel Core i7-7700, 16GB RAM, Nvidia GeForce GTX 1070

**MULTIPLAYER**  
No

**LINK**  
[store.steampowered.com/app/110800](http://store.steampowered.com/app/110800)

good at being a detective game. Cases often end in clumsy chases or labored fist fights, which feels like the desperate interjection of a producer intent on adding more action to the game.

## VICE CITY

Even then, this doesn't entirely take away from a game that makes me want to play it in a darkened room while drinking bourbon. It's an elegant and immersive representation of a city that's growing and changing, even if parts of it feel empty and procedural compared to Rockstar's modern output. There are times when the wider story feels crowbarred in, such as in Cole's clumsy flashbacks, but the feeling *LA Noire* leaves you with is a positive one: hazy pastel memories of fastidious deduction and distant conspiracies, punctuated by moments of comically intense interrogation. ■

## PC GAMER VERDICT

An immersive setting hides a detective game that's often clumsier than a Cole Phelps interview.

**76**



BELOW: Perhaps not what Lovecraft would have wanted.



#### NEED TO KNOW

EXPECT TO PAY  
\$15

DEVELOPER  
Spooky Doorway

PUBLISHER  
Akapura Games

## DOOLEY YOU COPY

Crime and clairvoyance in the **DARKSIDE DETECTIVE**

There's a guideline when it comes to writing fiction that suggests you should only have one supernatural element in a story. You can have ghosts, werewolves, or aliens, but ideally not ghost werewolves from Mars. *Darkside Detective* takes great delight in not just ignoring this rule, but holding its head down the metaphorical toilet and flushing.

There's a density of paranormal ideas here, all of which are informed and gleeful, like the developers took every weird piece of folklore on Wikipedia and crammed it into a single town. The result is something that feels like *The X-Files* meets *Columbo*: a small-town setting that holds every conceivable otherworldly delight. I almost wrote 'malevolence' there, but this isn't the case. The worst person you'll come across in Twin Lakes is

McKing, McQueen's brutal rival detective.

Like the original, *A Fumble In The Dark* is full of self-referential sass. Every opportunity for a punny place name or fourth-wall shattering joke is taken. This gives it a chaotic feel, which works well considering the protagonists are often as confused as the audience. The first case, which has you searching for your missing partner, Dooley, handsomely encapsulates the mix of wordplay, logic, and experimentation that underpins the series. Unlike other point-and-click games, the puzzles rarely reach the stage where you're desperately combining objects and NPCs in the vague hope something works. If you want a game that combines auction houses with Lovecraft lore, there's nothing better than the *Darkside Detective*. ■

84

## DAGON AWOL

Getting my feet wet in **THE SINKING CITY**

One key element of HP Lovecraft's work is that it's often difficult to articulate the terror his characters feel. His stories are full of entities so horrible they're literally indescribable. In the case of *The Sinking City*, for the most part, that fear translates into 'people who look a bit fishy'.

That's slightly unfair, because the game does provide a sense of pervading unpleasantness. Oakmont is a city slipping under the murk of the ocean, and the locations reflect this. It's a damp, rotting place, all barnacles and brackish water. It's also huge—probably too big for a place that rations fast travel and involves quite a lot of backtracking.

Elsewhere, *The Sinking City* struggles to find the balance between mystery and action. Like Frogwares'

brilliant *Crimes and Punishments*, protagonist Charles Reed has a mind palace and a series of visual tricks for uncovering evidence. Unlike Holmes, however, he has the charm and presence of an abandoned seaside resort. The mysteries, too, are frequently so dull that they make the sinister setting seem oddly commonplace. There's some attempt to make them feel magical and strange, but it often lacks the profane weirdness of the source material. Trying to piece together mysteries in the old city, however, is more interesting than the combat against the wylebeasts. A game like this was never going to exist without some sort of gunplay, but it does tend to break any building tension. But perhaps the alternative—a Lovecraft game where you squat in a puddle—isn't that attractive either. ■

BELOW: The Joker looked even more upsetting without his greasepaint.



#### NEED TO KNOW

EXPECT TO PAY  
\$35

DEVELOPER  
Frogwares

PUBLISHER  
Nacon

68



# EXTRA+LIFE

## CONTINUED ADVENTURES IN GAMING



## “I’m so glad I embraced the Way of the Chicken as well”

It’s not just Baldur’s afterglow that has me loving **DIVINITY: ORIGINAL SIN II**

**I** felt weird after my first playthrough of *Divinity: Original Sin II*—I was enthralled with it most of the way through, but then left on a sour note. Some of the final act fights in Arx are real pieces of work, and then everybody in the epilogue was all like, “Oof, bud, dunno if you picked the right ending.” I liked the ending I picked!

I knew I needed another go-around to really get into it and master *Original Sin II*’s unique take on CRPG combat, and with Larian’s *Baldur’s Gate III* contesting all-time favorite territory for me now, I’ve begun a backwards walk through the studio’s *Divinity* series, starting with an *Original Sin II* replay.

It took a few abortive attempts though, beginning on my Steam

### TED LITCHFIELD



**THIS MONTH**  
Got a Master’s degree in  
Divinity Build Craft Studies

**ALSO PLAYED**  
*Alan Wake 2*,  
*Deus Ex: Mankind Divided*

Deck. *Baldur’s Gate III* is a masterclass in squeezing tactical RPG gameplay onto a pad, but I don’t think we were all the way there with *Original Sin II*. I bummed around the tutorial ship a bit before retreating to the safety of my desktop and its mouse and keyboard precision.

And even then, it took me a minute to get going. I got through a chunk of the Fort Joy Ghetto before slamming into a fight where, no matter what I did, the goddamn black cat you have to babysit kept dying no matter what I did. I took a week or

**TOP:** This is still such a gorgeous game.

two off, and in that time I seriously boned up on my powergaming.

### BUILDS, BABY

*Original Sin II*’s unique magic/physical armor system, where you can only crowd control enemies once their defenses have been stripped away, was a stroke of genius. It removes any feeling of unfair randomness from stuns or status effects, instead making this a game all about tearing away enemies’ armour and turning them into chickens before they do the same to you.

I had to stop playing *Original Sin II* like the RPGs I was used to, and

## THE GAME FINALLY CLICKED LIKE IT NEVER HAD BEFORE ON THAT FIRST PLAYTHROUGH





instead adapt to its unique rhythms. As opposed to a balanced party of tank, DPS, healer and spellcaster, I crafted a lineup of pure damage/controllers, each gunning for enemies' physical armor in a different way: dual-daggers rogue, two-hand warrior, an archer and a support summoner.

The game finally clicked like it never had before on that first playthrough, and I'm so glad I embraced the Way of the Chicken as well—*Original Sin II*'s Chicken Claw spell, which polymorphs enemies into harmless poultry, isn't just hilarious: it's one of the most effective crowd control abilities in the game.

I've just sailed through *Original Sin II*'s base difficulty this time, even though I do still think it's a more challenging game than *Baldur's Gate III*. While I don't love leveled RPG loot, *Original Sin II*'s implementation is one of the best I've seen, keeping the deluge of color-coded gear interesting as you navigate through its aggressively level-locked areas.

I'm close to the end now, and while I'm not looking forward to being scolded again for giving god power to everybody instead of hoarding it for myself, I at least know it's coming this time. ■



## “I slide into the toilet in slow-mo”

Relearning to love bullet time in **MAX PAYNE**

▶ ROBERT JONES



**THIS MONTH**  
Cosplayed as Captain  
BaseBallBat-Boy

**ALSO PLAYED**  
*SIGIL II, Baldur's Gate III*

**I**t's only now, as I slide into the toilet in slow-mo, twin Beretta 92FS pistols blazing, that I suddenly realize that, boy, Max's laundry bill is going to be high this month. Sliding on the floor at the best of times is going to leave your clothes in a bad state, but sliding around on the filthy floor of a mafia-run drug den and knocking shop's toilet is going to take Max from Prada to pauper in seconds.

The Berettas have done their grim work, though, and two burly mafia goons now lie slumped against a bullethole-peppered wall. Like the floor, the wall is dirty. Why can't the mafia keep their places of business clean? I turn the corner of the run down, gang-owned, knocking shop's corridor and throw a Molotov cocktail onto the card table that three made men are sat around, gambling. The explosion coats two in a horrible, fiery death, while the

other narrowly escapes, rolling out behind a counter.

Hearing the commotion, two other goons burst out of a nearby door and, just like that, the corridor leading to my bathroom refuge is an adrenaline-pumping rush of slow-mo gunfire that would give John Woo a wet dream.

### SLOW-MO LOW BLOW

What I hadn't remembered is just how brutal the combat in this game could be, though, with Max frequently left in a bloody, bullet-ridden mess on the floor despite his ability to utilise bullet time slow-mo. Time your use of bullet time badly or, like me, accidentally trigger a slow-mo dive out of a bathroom cubicle while trying to reload a shotgun, and you'll be gunned down by an enemy in no time.

Max is also, almost always, low on health and on the brink of death in this game. Mr Payne limps around, holding his chest, his trenchcoat and slacks covered in blood, almost all the time, just one bullet away from kicking the can. That leads to many frustrating low blow deaths, but it also seriously adds to the tension and fun. Plus, it feels entirely in-fitting with this game's dark noir atmosphere and narrative. Was it a design decision by Remedy to deliver plenty of pain? I'm more convinced now than ever. ■



# “Manages to capture a rhythm that feels like it might mimic real climbing”

**JUSANT**’s focus on the fundamentals of climbing is peak design

**J**usant commits to the bit on a single system in a way that reminds me of 2000’s console launch titles meant to sell a peripheral control device, and I’m totally into that peak focus from a climbing game. It’s about scaling cliff faces at the bottom of a long-dry ocean with a mix of free climbing and line climbing.

There’s no special kit required here though, unlike rock climbing, though *Jusant* does recommend a gamepad, which I second. Most often, *Jusant* plants me in front of a cliff face studded with barnacles and natural rock features. I attach my line to a designated point at the bottom and begin my climb, squeezing my left or right trigger to grip a handhold while steering my other hand towards the next hold with the analog stick.

The tactile back and forth of squeezing left and right triggers for each handhold really makes the experience. Even as *Jusant* layers in additional abilities like double jumps and magical plants that serve as handholds, the fundamentals are a constant left right left right vertical

▶ **LAUREN MORTON**



**THIS MONTH**  
Cramped her hands both in-game and out.

**ALSO PLAYED**  
*Planet of Lana, The Cosmic Wheel Sisterhood*

march upwards. On longer stretches I’m encouraged to plant another piton into the rock to secure my line so I can’t fall all the way to the bottom. Occasionally the puzzle of it gets trickier, challenging me to find alternate routes around sections without handholds or plant a piton and use my line as a swing to cross horizontal space.

## A RHYTHMIC BEAT

The physicality of it, the way that *Jusant* manages to capture a rhythm that feels like it might mimic real climbing, is the big win. It reminds

## I DON’T THINK THE REAL DISSATISFACTION THERE WAS WITH VISUAL CUES THOUGH

me of the very satisfying mortar, pestle and cauldron of *Potion Craft*. Both put the joy back into systems that too many other games have made a bit boring.

There was a minor social media scuffle earlier this year about action games all using yellow paint to mark climbable ledges. I don’t think the real dissatisfaction there was with visual cues though. *Jusant* has its own smatterings of painted wood boards and interactive holds, even. It’s more that the concept of climbing has so often been quicktime-ified, shoved into a mindless ‘hold joystick forward and press A’ affair.

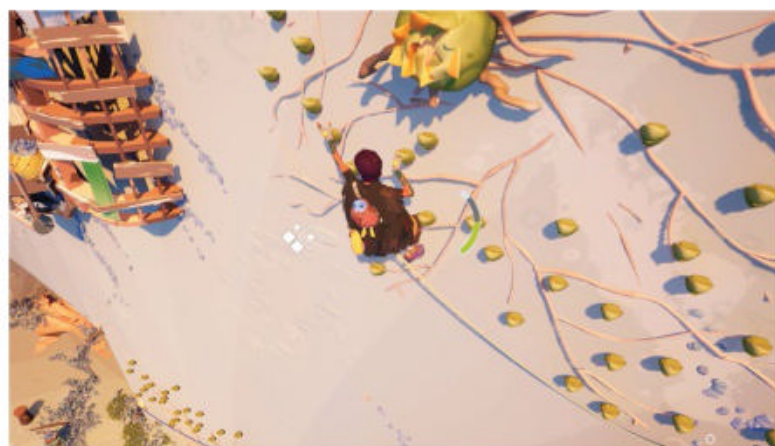
*Jusant* doubles down on just the manual actions of climbing, and there’s a real satisfaction in it. In some sections I scramble with frantic trigger pulls up a section of wall while the plant nodes I’m holding are burning in the sun and about to crumble beneath me. It was quite unexpected to see a climbing game from the studio behind the narrative adventure *Life Is Strange* series but they sure have pulled off the trick. *Jusant* was a lovely five-hour trek that kept me coming back several evenings in a row. ■



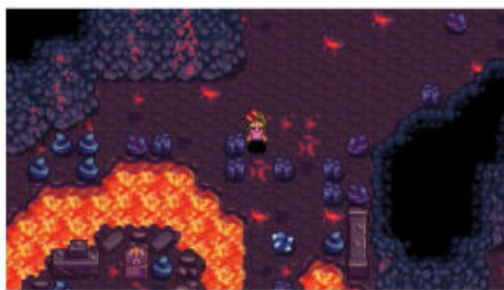
It wouldn’t be an adventure game without an adorable, wearable companion.



**BELOW:** Don’t look down, other than to admire your work.







# “Dumping huge quantities of home-made starfruit wine on the market”

Watching cheaters prosper in **STARDEW VALLEY**

**T**he funny thing about my job is that I spend as much time watching other people play games as I do actually playing them myself. This is true at home as well, and I've written before about watching my family play *Stardew Valley* while I am forced to look things up in the game's wiki, doling out advice about how much wood it takes to upgrade your farmhouse and which ax you need to clear big logs like some sort of small-town Socrates.

Pelican Town and its inhabitants have become popular again after a fallow period, but this time it's different. The reason: cheats and mods. *Stardew Valley* is an extremely pliable game, and the modding engine SMAPI is easy to install. From there, it's just a case of firing up the Vortex Mod Manager from Nexus Mods and installing what takes your fancy, such as the *CJB Cheats Menu* mod from CJBok and Pathoschild.

As a result, I've watched *Stardew Valley* become an obsession again.

IAN EVENDEN



**THIS MONTH**  
Said 'five iridium bars' over and over and over and over again.

**ALSO PLAYED**  
*Jusant, Baldur's Gate III*

I've seen farmers acquire millions in gold in the spring of the first year, get married to people they just met, complete the community center before lunch, stop time, warp around the map and obtain a statue that spits out iridium bars. There have been long discussions about who's best to marry, which are the most lucrative fish to put in ponds and whether you have to wait for a quest to drop before you can retrieve Mayor Lewis' underpants from Marnie's bedroom, and why they might be there.

## I'VE SEEN FARMERS ACQUIRE MILLIONS IN GOLD IN THE SPRING OF THE FIRST YEAR

**TOP:** It's a beautiful day in the village, and you are a horrible goat

### FIRST, DO NO FARM

But the thing about cheats is they ruin games. They strip them of their challenge, and even if you think a game is too hard before you start cheating, you'll come out the other side thinking it's too easy, that you've seen all it has to offer, and looking for something new. Games reveal their secrets at a measured pace, building on that first harvest of parsnips in the spring until eventually you're dumping huge quantities of home-made star fruit wine on the market three years later.

It reminds me of the time I breezed through *Wing Commander* by typing WC Origin -k at the DOS prompt for invincibility and the ability to destroy any ship with a keypress. It was the only way I was going to see the end of the game, as I was trying to play a space shooter with a mouse and keyboard rather than the joystick it wanted, but if I'd ever managed to take down the Kilrathi myself I'd have had a feeling of accomplishment that I lost through cheating. And it's a bittersweet feeling to see the same thing happening all over again. ■



# COUNTER-STRIKE 2

Steam's most-played game gets a new lease of life. *By Mike Stubbs*

**Y**ou can easily make the argument that *Counter-Strike 2* is not an update to *Counter-Strike Global Offensive* and is actually an entirely new game. With a new engine, updated maps, major changes to smoke grenades and finally a decent in-game ranked system it has changed almost every aspect of *CS:GO*. But had this launched as a new game rather than replacing the decade-old version there's a good chance the player base would be split more evenly than you might imagine across the two.

Most of the new additions in *Counter-Strike 2* have been received well. The biggest change you'll notice is the new smoke grenade physics, which now bloom to fill a space and can be impacted by bullets and other grenades. Launch a HE frag grenade into a smoke and it will blast a hole in it, giving you vision.

While firing bullets through a smoke to get vision isn't all that useful, using a HE to create a gap in a smoke has become a default strategy that everyone is using. It's also changed the flow of a round, as smokes are no longer a safe visual barrier, causing some strategies and common positions to become almost useless. This simple change has freshened up the average round, and

## NEED TO KNOW

**RELEASE**  
September 27

**DEVELOPER**  
Valve

**PUBLISHER**  
Valve

**LINK**  
[counter-strike.net/cs2](https://counter-strike.net/cs2)

alone has made things different enough that it feels like a new game.

Most of the other changes in *CS2* are more minor or fall more on the side of quality-of-life improvements. There's a new buy menu, improved audio and Premier matchmaking that is the only one that gives you a CS Rank (think MMR) and features a pick ban phase to decide the map you play. It's way better than the poor competitive matchmaking of *CS:GO*, but hardcore players will likely still choose a third-party alternative.

## SUB-TICK SUCKS?

But it hasn't been smooth sailing for *CS2*, and that is mostly down to its other big change—sub-tick servers. In *CS:GO* a server would check for inputs 64 times a second on standard servers or 128 times on third-party servers. This meant there could be a microsecond of delay between pressing a button and the server recognizing it. Now, sub-tick servers remove that delay by tracking the exact time you press a button and sending inputs to the server in that order. On paper, it sounds like a great idea, removing

the split-second delay should only increase the skill level. But in practice, it has been one of the most divisive additions to *Counter-Strike* ever. Top players have been complaining about a number of issues, from shooting not feeling right, to movement being sluggish and what feels like lag when someone peeks round a corner.

For average players, a lot of these issues go mostly unnoticed. You might occasionally feel like you were shot by someone you couldn't even see because they peeked and the game didn't show you, but generally speaking, unless you are at a pro level these issues aren't going to impact you too much.

## THERE HAS BEEN A LOT OF CRITICISM AIMED AT VALVE

But there has been a lot of criticism aimed at Valve by pro players, many of whom believe *CS2* is worse than *CS:GO*. Arguably the best *CS:GO* player in the world, Oleksandr 's1mple' Kostyljev criticized the game on Twitter, telling people to wait for updates to fix it before playing, and has since taken a break from pro play.

While there have been some clear issues in the early days of *Counter-Strike 2*, including the hilarious Michael Jackson peek where it looked like players were running around leaning like they were in the Smooth Criminal music video, it feels like a lot of these issues people are complaining about are just a result of a game they have played for over ten years feeling different. As someone who isn't a high-level player, I couldn't reliably say that the sub-tick movement feels worse or makes it harder to play, it just feels different and a new challenge to learn.

If you happen to be a professional-level *Counter-Strike* player then you might want to do as s1mple said and wait for updates before fully investing your time in *Counter-Strike 2* because the game is likely to change over the coming months. But for everyone else, the transition from *Counter-Strike Global Offensive* to *Counter-Strike 2* is the perfect time to jump back into *Counter-Strike*, and you'll probably be surprised how much it has changed. ■

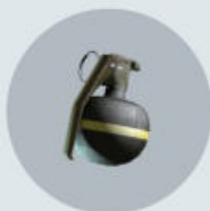
## SMOKING KILLS

How to play with smokes in *CS2*



### AK47

Shooting through smoke can give vision, but it reveals exactly where you are.



### HE GRENADE

A HE grenade is a much safer option to break up smokes, providing you throw it well.



### DECOY GRENADE

Decoy grenades aren't useful for much, but they can light up a smoke and scare players in it!



### MOLOTOV

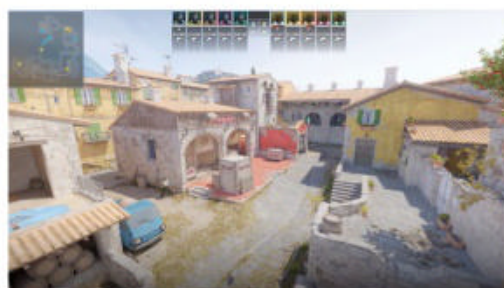
Smokes will still extinguish a Molotov on the ground.







The AWP is still the most satisfying gun in any game.



**ABOVE:** This was a bad time to inspect my weapon.

**LEFT:** The new look Inferno is absolutely beautiful at times.



for neutralizing an enemy with the P250  
for neutralizing an enemy with the P250  
neutralizing an enemy with the P250





It's brutal mob warfare, 24/7.

# THE ELDER SCROLLS IV: OBLIVION

Turn Cyrodiil into a battleground with Nickies' Worldwide NPC Gang War. *By Joshua Wolens*

**I**'ve lost track of who's winning. All the residents of Skingrad have descended into barbarism, going at each other with knives and clubs and fists and arcs of fire and lightning. They're yelling battle cries, but over the swords and the screams I can't make out what they're saying.

I know they're fighting for Skingrad, though, for control of the city itself, each citizen's faction denoted by the colour of the hood on their head. Blue is winning, I can tell. The screaming is lessening, my framerate is increasing. "Can't we settle this peacefully?" comes the flageolet voice of Lazare Milvan as he brings a steel warhammer down, into, and through the skull of Salmo the Baker.

This carnage is the product of *Nickies' Worldwide NPC Gang War*, a

## NEED TO KNOW

**RELEASE**  
March 20, 2006

**DEVELOPER**  
Bethesda Game Studios

**PUBLISHER**  
Bethesda Softwork

**LINK**  
[elderscrolls.bethesda.net](http://elderscrolls.bethesda.net)

mod for *The Elder Scrolls IV: Oblivion* that turns Bethesda's rambling RPG into a feral, province-wide melee. Drop the files in your data folder and suddenly every character you meet will be sorted into one of a number of gangs—equipping a hood of a particular hue to mark their allegiance—before dedicating themselves utterly to an all-eradicating crusade against everyone in a different hood in a quest to assume control over each of *Oblivion's* cities.

## TURF WARS

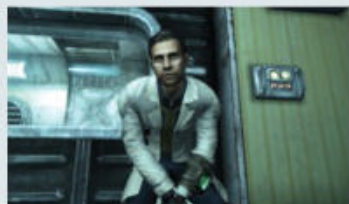
It's framerate-tanking lunacy, and my mission to get it working saw





## FIRST IMPRESSIONS

*Bethesda RPGs have memorable prologues*



### FALLOUT 3

Maybe the best opening in games, ever. Your entire childhood is a tutorial.



### OBLIVION

A performance by Patrick Stewart bookends this dungeon crawl and sets you loose in Cyrodiil.



### MORROWIND

Filling out paperwork quickly leads to spying, an unsolved murder and other starter quests.



### SKYRIM

In retrospect it's a pretty ho-hum opener, but you can't argue the wagon scene isn't iconic.

me start 20 new games and experience an even greater number of crashes, but I love it. Gang membership spreads virally: if one figure with a hood approaches a crowd of unaligned NPCs, their heads will suddenly sprout hoods like factional fungal bloom.

Then they all start killing each other, leaving the city streets eerily empty as everyone congregates at one corner for a knock-down, drag-out brawl. It's two whole kinds of scary: the first kind comes as you roam the streets of empty cities, desperately looking for the war like you're hunting down a party you've not been invited to. The second part comes when you find it.

The extreme violence is an absurdity that works particularly well in *Oblivion's* waxwork world, as if all these plastic dolls have finally given up on pretending to be human and unleashed the beast inside. It's reminiscent of the Working Joes from *Alien: Isolation* in the way they switch instantly from stiff, uncanny etiquette to utter bloodthirst.

## COLOR GUARD

Once every character in a differently colored hood is safely in the dirt, the remaining gang instantly snaps into *Oblivion's* trademark stunted conversations in groups of two or three. "Arch-Mage Traven is the first to take such a hard stance on Necromancy," says a Khajiit with one foot on the dead face of Ontus Vanin. It makes me wish we lived in the world where Bethesda had leaned into the unearthly jank that inhabits all its games instead of angling for unattainable realism. Would I like *Starfield* more if there was a possibility Sam Coe's hat could change color at any time, leading him on a quest to exterminate all life in the galaxy? Yes, and my vocality on this topic is why they didn't let me write the review.

It's not just about aimless violence, although that is a solid percentage of it. The *Worldwide NPC Gang War* mod turns *Oblivion*

into a bonafide territory control game. Each faction tries to recruit new members while at the same time assaulting and seizing the game's cities (by entering their various castle throne rooms and hitting modded-in 'I win' buttons). Once the gangs have reached a certain number of members and every city has had a 'victory banner over the Reichstag' moment at the hands of your favorite Mages' Guild member, a great final conflict is meant to take place in the Imperial City.

## BLOOD FEUD

Meant to. I confess, I never got that part to work quite right in my hours with *Oblivion: Gang War Edition*. All my gangs were made up of real lazybones: once they'd finished the immediate slaughter and seized



## THEY JUST HUNG OUT AND TALKED ABOUT MUDCRABS

their cities of residence, they just hung out and talked about mudcrabs and other stuff.

But given what an effort it was to get the mod working at all without crashing—something I attribute, basically arbitrarily, to the fact I'm running Windows 11—I wasn't keen to poke at its fragile functionality to make that aspect work. Besides, I got to see an octogenarian wizard abandon his spells and absolutely annihilate a man with a club, which ordinarily isn't an experience you can get outside of specialist venues.

The author of this mod, Nickies, has more inventions in the same vein. There's the mod that lets you order real-life Domino's pizza via an *Oblivion* NPC, another mod that lets you turn anyone in the game into a book, and an especially interesting mod that curses you with a nemesis who will hunt you down between different *Elder Scrolls* games—*Morrowind* and *Oblivion*, to be precise. If, like me, you're still carrying a torch for the Bethesda of old and are into the idea of seeing just how weird people are getting with it in 2023, you can find all of Nickie's creations on the Nexus Mods website. ■



**LEFT:** Time to storm Imperial City.

**ABOVE:** The streets quickly run red with blood.

**FAR RIGHT:** The Red Hoods win this round.







# SURVIVE ZOMBIES IN MODERN WARFARE 3

Crush undead hordes with these tactical tips. *By Sean Martin*

## NEED TO KNOW

**DIFFICULTY**  
Normal

**TIME**  
A few hours

### VITAL LINKS

**Best SVA 545 loadout:**  
[shorturl.at/gxyOR](http://shorturl.at/gxyOR)

**Destroy a Merc Convoy:**  
[shorturl.at/bgiA5](http://shorturl.at/bgiA5)

**How to get Schematics:**  
[shorturl.at/kADRW](http://shorturl.at/kADRW)



## GET MOVING

**1** Staying still is a sure-fire way to get yourself swarmed by zombies in MWZ, so keep relocating and don't hang about too long. If you complete a cargo contract, you can get a handy armored truck that'll make ferrying around the wasteland much easier.



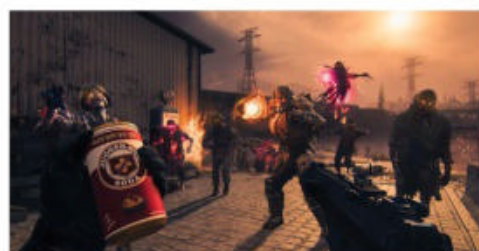
## BRING BIG MAGS

**2** There's nothing worse than needing to reload while a zombie horde is bearing down on you, so bring an assault rifle with an expanded mag, or an LMG. While running dry isn't a problem – since zombies drop ammo – maximizing your kills per mag will keep you breathing.



## ARMORED

**3** Besides moving, your only real defense against hungry undead is your armor. Ensure you're stocked up on plates by picking up those the zombies drop, and keep your eyes out for armor vests to increase your survivability as you venture deeper into each zone.



## SPECIAL ABILITIES

**4** Boring old field upgrades transform into killstreak-based special abilities. As you mow down wave after wave of zombies, your killstreak will charge, letting you plant a powerful energy mine, freeze and stun enemies, or even heal yourself or turn invisible.



## HEADSHOTS

**5** Anyone who knows anything about zombies knows to blast 'em in the head, and that's no different here. While spraying your machine gun in a mass of bodies may provide a certain pleasure, headshots are the way to go if you want to kill quick and efficient.



## PUNCH UP

**6** If you're hankering to explore higher threat level zones, you'll want to upgrade your weapon. Aetherium Crystals and Pack-a-Punch machines provide extra damage, while Aether Tools increase weapon rarity.

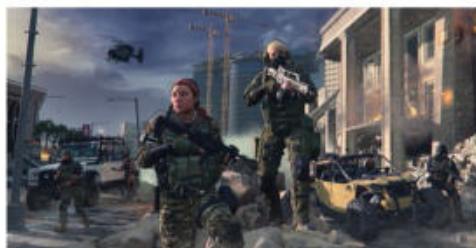


## ACQUISITIONS

**7** Sadly, your weapons revert back to normal when you escape from MWZ, but you can craft upgrade items to bring in with you. Earning Schematics as activity or mission rewards and exfil-ing with them will let you craft Aether Tools or even Perk-a-Colas to buff your Operator.



## KNOW YOUR UNDEAD *From zom-A to zom-B*



### BEWARE OF MERCS

**8** Mercs are hired soldiers who'll gun you down given half the chance. If you attack their bases or convoys, you can loot a keycard that'll let you raid a Mercenary Stronghold, and there, grab the Legacy Stronghold Keycard that lets you assault their main base in the north.



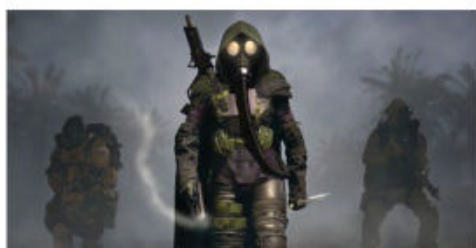
### HELLHOUND

**9** If you spot a Doghouse on your minimap and pick up a Chunk of Flesh as a random zombie drop, you can slot it in to recruit your own Hellhound. It's worth noting that applying the Brain Rot Ammo Mod to your gun also has a chance to turn zombies into temporary allies.



### HACK 'N SLASH

**10** Though getting up in a zombie's face to stab it may seem inadvisable, melee weapons are very strong in MWZ. This is partly because they grant increased movement speed, but also because they can dispatch most undead with a few fast strikes.



### BREATHE EASY

**11** Though gas masks may seem less vital in MWZ than in DMZ, say, they are vital for clearing both Aether Nests and Infested Strongholds. Having a gas mask will let you shoot the yellow cysts inside the building while negating the poisonous gas they spew out.



### SQUAD GOALS

**12** Playing MWZ solo is definitely viable in the low-threat zone, but if you want to push further, make sure to find a team. While there are self-revives in the game, having a nearby teammate to help you up and watch your back is invaluable.





# TIPPING THE SCALES IN BALDUR'S GATE III

## PART 4

In which Pillius Flenk  
discovers something fishy  
and pays the price

*By Matt Elliott*



S

omehow, Flenk has returned. Like mould in a student bathroom, our intrepid and persistent bard is back, pressing onwards toward certain danger and unlikely romance. In our last entry, Pillius resolved to travel to the Underdark, partly as a way of reaching Moonrise Towers, and partly to nurture the burgeoning relationship with his sad-eyed goth paramour, Shadowheart. Apparently, there are other Shar worshipers in the Underdark, so the team agreed to venture underground. For Shadowheart, it's a deep and meaningful way to meet like-minded associates. For Flenk, it's like going to a dark academia poetry evening just to impress the girl he fancies. The situation is further complicated by the appearance of Karlach: an enticing sideboard of a woman, who literally glows with energetic purpose. She's exactly the opposite of Pillius: brave, reckless and irresistible.

Like everything in Flenk's life, nothing is ever simple. But, for once, this isn't actually his fault. Karlach has a score to settle with some nearby paladins, which takes priority over his scheduled Underdark date with Shadowheart. It's not much of a detour, so, true to form, Flenk decides to appease Karlach by helping her kill her enemies. Although 'help' is probably too strong a word. Like a hazing ritual for a new rugby player, Flenk introduces Karlach to the team by playing Bard Dance on the lyre as she goes berserk and butchers everyone. And, in a portentous image of things possibly yet to pass, Shadowheart falls unconscious during the fight. It's possible Pillius did a bad job of marshaling his team, but a less charitable read is that she deliberately died to draw attention to herself. Stop making it all about you, Shadowheart. After the fight, Karlach goes wild, breaks everything, and sets fire to most of the building, which, again, should be something of a red flag for Pillius.

Paladins dead, we head back to camp to recharge, extinguish, and get ready for the Underdark. Except that the moment we arrive, a devil manifests to give Wyll a severe telling off for failing to kill Karlach. At this point, if we're honest, Flenk has the weakest grasp on what's actually happening. He also makes the mistake of trying to

compliment said devil, Mizora, as she urges her infernal frame into being. Everyone, including Mizora, hates it. Note to self, Pillius: do not try to seduce Cambions. It turns out that Wyll has violated the terms of his pact with Mizora, and, like Willy Wonka enforcing the terms of his contact with Charlie Bucket, she takes her revenge. Wyll, apparently, is a devil now. But he's still somehow the least interesting member of the party.

## HEARTS ON FIRE

Flenk finds time for one more distraction before we set off. Karlach has an infernal machine for a heart and it's in

## KARLACH HAS AN INFERNAL MACHINE FOR A HEART AND IT'S IN NEED OF A SERVICE

need of a service. Sensing another opportunity to ingratiate himself with a new member of the team, Flenk decides to help. We take another detour back to Emerald Grove in order to find a drive-thru heart specialist so Karlach can get a tune up. At this point, surrounded as he is by mages who eat magic items, angsty vampires and a beautiful burning machine woman, Pillius is beginning to think that he's the most balanced and functional member of the party. We return to the druid enclave to find it almost deserted. The Tiefling specialist we need has long since departed. There's a brief moment when yet another devil appears, and whisks us all away to a lavish mansion crammed with delicious food, but having recently experienced what happened to Wyll, Flenk isn't about to enter into any Mephistophelian pacts, not least because horns would unbalance his striking good looks and get in the way of his stylish headwear. It's also quite hilarious how dense and full of distractions the world is. Every time we make progress towards the Underdark, something distracts us, making Flenk the equivalent of a flighty Labrador in a world of high-fantasy squirrels.

We set off with renewed focus towards our goal. Literally nothing and nobody can distract us from our

purpose. We are going to Moonrise Towers. No more delays. It's around now, of course, that the dragon appears. There's a terrifying moment where a band of githyanki butcher the same enemies Team Flenk was too scared to engage. We're about to sneak past when Pillius notices his former companion, Lae'zel. Against the advice of the entire team—including, quite obviously, Shadowheart—Flenk decides to pop over and say hello. It's a tremendously bad idea. It's quite obvious that the githyanki are murderous elitists, and that they're also hunting for the mysterious artifact carried by Shadowheart. Lae'zel begs Flenk to stay quiet, but that's like asking a public toilet to smell like pot pourri. So, true to form, Flenk heroically interjects. There's a

## THE RULES

1. You need to be adored. Say yes to everything.

2. Do everything possible to avoid actual physical confrontation.

3. Thrill your party by performing a song during every fight.

Shadowheart's face when she smells Flenk's natural musk.





» moment where it seems like his weaponized bluster might doom everyone, but, somehow, the githyanki leader not only decides not to kill him but entrusts him to help track down the lost artifact. This is a double rainbow for Flenk. Not only has he promised help to someone he has no intention of providing, he's also managed to impress Shadowheart while doing so. She's less impressed, however, with the possibility of Lae'zel joining the Pillius massive. In truth, Flenk has an intense dislike for Lae'zel—she's arrogant, direct, and unimpressed by his faux bravado—but refusing her requests would also be breaking rule #1 of this diary. So, much to the distaste of everyone, Lae'zel joins the camp.

### THRONG DIRECTION

It turns out we've been going the wrong way to the Underdark, and the entire episode with the dragon was unnecessary. It doesn't matter. Imbued with fresh vigor, the team returns to the goblin outpost in order to find the hidden entrance to the lands beneath. There is, as ever, a complication: we've completely forgotten that the goblins haven't forgiven us for murdering their leaders. And there are lots of them. This turns into a massive, unavoidable scrap, but thankfully it's a simple one. Karlach cuts a gleeful swathe through our feckless enemies, which really doesn't help the 'Flenk fancies you more than Shadowheart' thing. We bludgeon our way through the ruined temple, and there's a gnawing sense that all the hard work we did to avoid combat while killing the goblin generals was rather pointless. By the time we're done, 90% of them are dead anyway. If nothing else, it's a fine opportunity for Flenk to practice his lyre-work while everyone else does the fighting. For the goblins, it's a grim battle for survival; for Flenk, it's a recital.

Flenk schmoozes his way past Priestess Gut's lackwit bodyguard—who's still doing her job despite her boss being long dead—and solves a simple puzzle to finally open the way to the Underdark. I'd love to tell you that Flenk has deliberately been procrastinating to avoid his subterranean adventure, but the truth is that he's actually been trying hard to reach this point. The route to Moonrise Towers, it seems, is lined with enticing narrative speedbumps.

**BELOW:** There's no way I'm walking past a mushroom this rude without taking at least one screenshot.



## THE CHURCH OF FLENK

*God vibes with Pooldrip the Zealous*

**COME WORSHIP  
MAHKLOOMPAH!**

We're not just mad...  
we're sacra-mental!

Every Sunday from 10am in  
The Festering Cove



Perhaps the most surprising thing about the Underdark is that it's beautiful. Flenk was expecting a dank, foetid hole with neither light nor hope. It might be the spores talking, but it's actually the sort of place he could write songs about: bioluminescent mushrooms, shimmering lakes, and iridescent trees. It's so nice that he's actually having second thoughts about going topside again, and he's not just saying that to agree with Shadowheart. The only things taking the edge off are the traps, petrified drow, and legions of vast, braying minotaurs that seem to be patrolling the gloom.

### WYLL POWER

Cautious exploration, though, yields some pleasing results. Flenk finds a magical drow sword embedded in the rock. Using a mix of arcane knowledge and winging it, Pillius learns that shedding blood will free the weapon from the unyielding stone. Flenk doesn't especially like the sound of that, so he convinces Wyll to cut himself open instead. And, sure enough, the blade comes free. Best of all, it's a performance-based weapon, called Phalar Aluve, with a buff that plays a melody. So it's essentially a musical instrument that kills people, which feels like a massively on-brand weapon for our hero.

Deeper into the Underdark we go, bothered by exploding mushrooms and distracting spores. We briefly say hello to some peaceful, sentient mushroom people, but Flenk's goal here is still to discover the Dark Justicars for Shadowheart. With that in mind, we continue to explore, past decrepit villages and phallic shrooms. It's all slightly less threatening than expected, but it's also a place packed with secrets and surprises. Gripped by the sudden spirit of adventure, Flenk can't help but delve deeper.

### FISHER KING

After clambering over toadstools and down rocky surfaces, the Fellowship of Flenk discovered something unexpected: a group of wildly-chanting, berobed fish people,





## CAUTIOUS EXPLORATION, THOUGH, YIELDS SOME PLEASING RESULTS

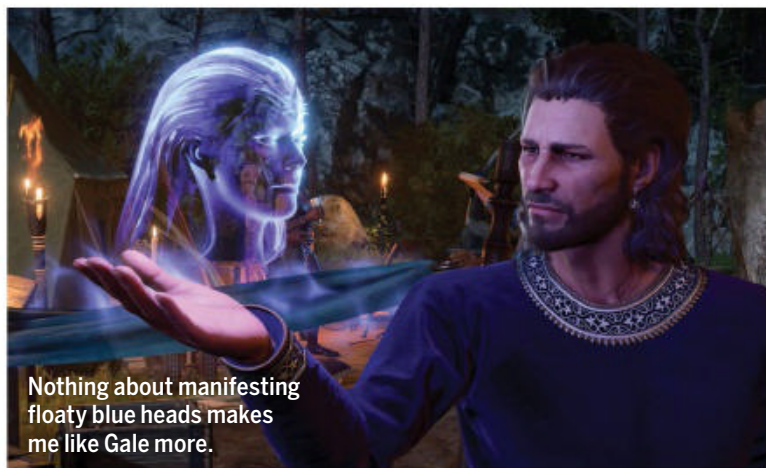
capering in front of a blood-soaked altar. Nothing about this seems especially enticing to Flenk—it has big ‘you’re next’ energy—but he stumbles into the ritual nonetheless. What follows is slightly confusing. The fish people, known as kuo-toa, are worshiping a deity named Boooal. Who, it turns out, is not a god at all, but a wizened Redcap who’s misleading the feeble-minded fish folk. This, Flenk recognizes, is a unique and wonderful opportunity.

Mustering the full strength of his performative powers, Flenk tries to convince the kuo-toa that they’re following a false god. The Redcap’s power wanes as his authority is questioned, which leads to a tantalizing possibility. Perhaps another, more worthy leader might shepherd our

scaly devotees to a peaceful and glorious future? With this thought in mind, Flenk manages to convince the kuo-toa that not only is Boooal an imposter, but they should punish him for his blasphemy. They turn on their former master, but this leads to a crisis of faith. Their god is dead, and they require guidance. It’s with this benevolent thought in mind that Flenk steps forward. The high priest of the Cult of Pillius, Pooldrip the Zealous, christens him Mahkloompah. Perhaps not the most impressive or imposing name for a god, but it’ll do. Pillious Flenk, apparently, has become a god.

And so it ends. Pillius did not help a beautiful, glum half-elf find her people or purpose. Nor did he replace the infernal heart of a smoldering feral bodybuilder. Instead, he focused on the person he loves most in the world: himself. And yes, he might only be worshiped by 16 deranged fish people who live in a part of Faerûn he discovered completely by accident, but he is, nevertheless, a god. What more fitting an end could there be for a man who existed solely to be adored by all? Praise Pillius. ■

**ABOVE:** I’m not sure why, but I did not expect to see a dragon in this D&D game...



Nothing about manifesting floaty blue heads makes me like Gale more.





# ROLE-PLAYING IN MMOs

The keyboard is the door to endless adventure. *By Harvey Randall*



LEFT: Not pictured here: about four hours of fantasy politics.





**M**y heart will always return to the MMORPG for one simple reason: they're perfect games for role-playing, and they've stayed that way for years.

When the first MMOs were hitting the market, their large, shared worlds primarily existed to take advantage of a novelty: internet chat rooms. Those huge grinds and mandatory group activities were built to bring gamers into contact with one another. Entertainment wasn't the primary goal, community was.

That design philosophy just doesn't work any more. MMORPGs (rightfully) introduced group finders and the like, while players migrated to Discord servers and subreddits. The social aspects wilted on the vine for the sake of convenience. All except one: role-playing.

"Role-playing? That thing nerds do? Psh, that's so lame. How am I supposed to pwn noobs if I'm busy talking ye olde English?" Well, imaginary person I'm arguing with, besides the fact nobody uses the phrase 'pwn noobs' any more, role-playing is a lot more than Shakespeare in the park.

It's collaborative, never-ending writing. You rock up with a character, step into their shoes, and see where the story goes with your friends. You can tell stories in any genre, depending on your game and guild. In *Final Fantasy XIV* alone you can become a monster-slayer, a bruiser for a criminal organization, a fighting pit champion, or just a bartender.

One character I met in a *City of Heroes* private server was just called A Corpse. They'd use a glitch to die in the middle of a club and stay there for hours on end, doing nothing. I grew fond of that guy, they were like a mascot—or one of those people who gets famous in New York for giving out free hugs.

## THE TYPICAL ROLE-PLAYER

*A scientific look into the role-player's psyche*



I can't help but laugh whenever some company tries to sell me on large-language model AIs, with the sales pitch of "imagine playing Dungeons & Dragons without needing a DM", or "play through your favorite worlds forever." I can already do that. Call me a Luddite if

## YOU ROCK UP WITH A CHARACTER AND SEE WHERE THE STORY GOES

you want, but I've been doing that since, like, 2008.

I've been embroiled in plotlines that are months in the making. I've played characters who've become very dear to me, occupying parts of my brain and shaping my personality as I grew up through my awkward teenage years. Friendships—ones made with other writers as well as

their characters—grow organically through hours of play.

Each player gets to bring their own brain gremlin to the storytelling supper. Recently, in *Final Fantasy XIV*, my RP group sat down to talk over what they'd be doing with a gang of runaway soldiers that had committed some grave crimes during their service. We had a deep debate in the game's chat window, for like four hours. It ruled.

### FANTASY FEELINGS

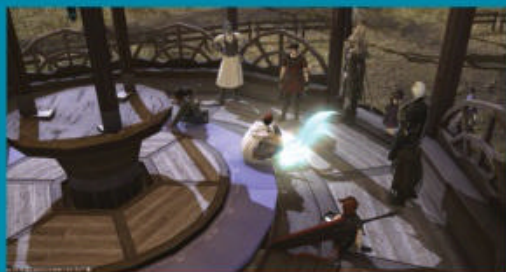
The resurgence of tabletop games like D&Ds has brought role-playing back to the mainstream, and while I do adore those games, there's something about the sheer amount of time you can spend in an MMO that makes it hit different.

Sessions can be scheduled, sure, but you don't need a weekly time slot for most role-play. Go into one of the main RP servers in *World of Warcraft*, hit up Stormwind, and you'll likely see folks just milling about, doing their day-to-day thing.

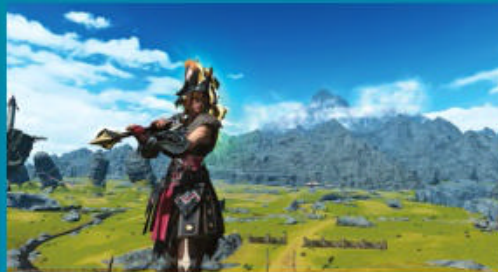
Some writers will tell you that, after a few novels, their characters will start to speak and talk almost entirely on their own. The same is true of role-playing—even if I've not played a character in years, I could probably hop back into their shoes if pressed.

These characters—little bits of your subconscious—can grow, learn, and tell you things about yourself if you let them. I've both shed tears and busted my gut laughing during role-play. The community even has a term for it: emotional bleed.

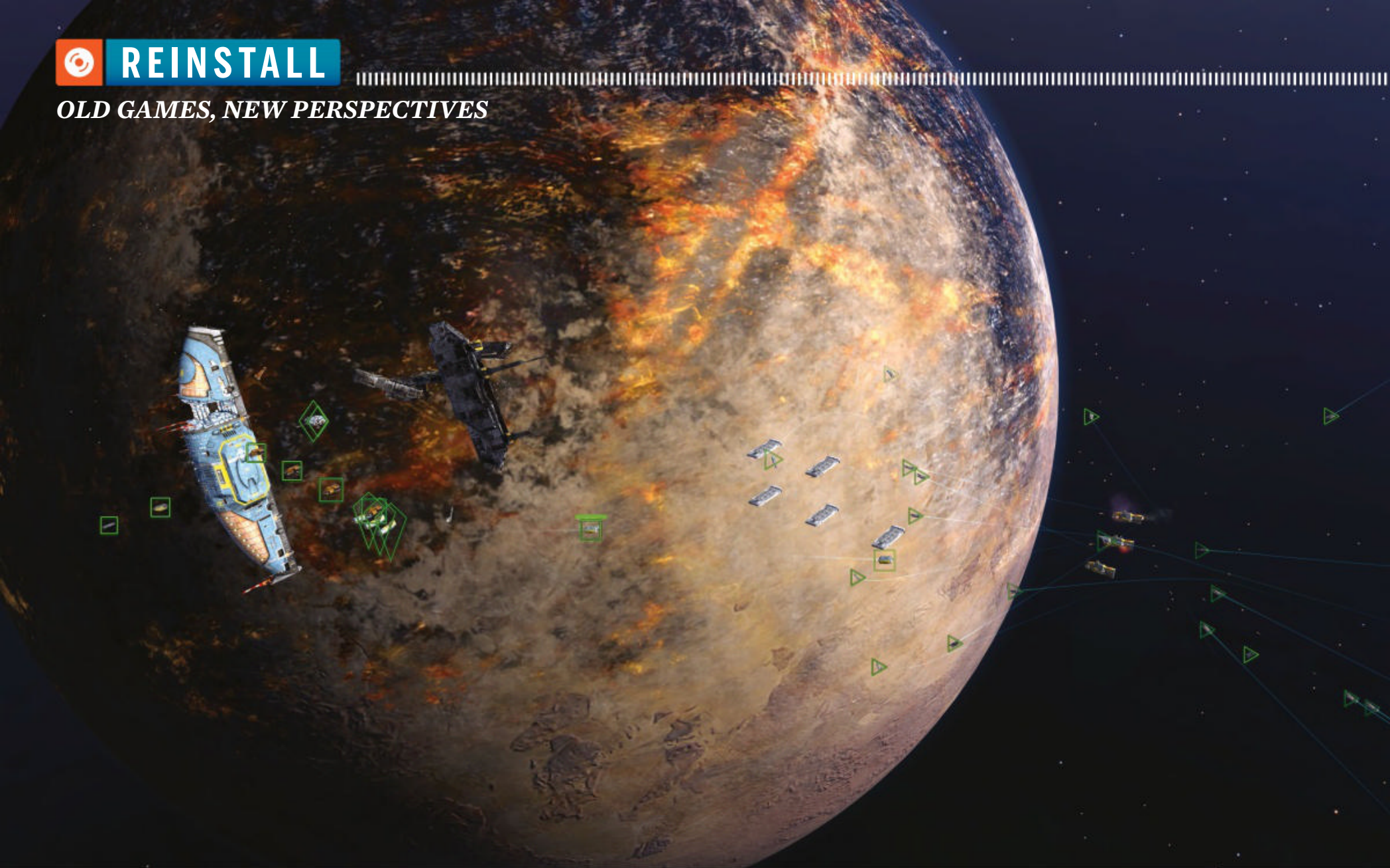
While that bleed can become unhealthy, it's huge for gamers who'd otherwise have no ability to express themselves, whether due to disability, a difficult home environment, or any number of reasons. It's a safe place to explore parts of yourself—or you can just become a gnome named Stinky who hands out apple pies to people. Maybe that's your inner truth. ■



**LEFT:** A group of adventurers (and one glowing dog) gather to discuss their plans.







# HOMEWORLD

Going 3D space bananas in Relic's groundbreaking RTS. *By Ian Evenden*

**A**s the release of *Homeworld 3* nears, the original game remains an enigma. It's not directly available on Steam, or even GOG. To play it as it was you need the original discs and a PC that can accept them, and this means it hasn't had any official updates to allow it to run on modern machines. Unless you're one of those weirdos from the Hardware section of this magazine who keeps a 1999-spec PC in a special room with The Matrix and Red Hot Chili Peppers posters on the walls, there's a good chance you're not going to be able to play it.

Unless, of course, you install the remastered edition, which came out in 2015 and so practically counts as

retro itself. That's what I'm reinstalling here, as my copy of the original disappeared years ago along with my Matrix posters. You can play the 'classic' version of the game through the remastered version's launcher, but I wouldn't recommend it: not only does it not seem to support 16:9 resolutions, but turning the res up above 1999 levels brings all sorts of scaling issues on modern screens, rendering text pretty much unreadable.

The Steam version of the game also now comes with a splash screen advertising *Homeworld 3* and asking you to wishlist it, which completely filled my main 4K monitor and overflowed to my second screen, pushing any OK or close button off-screen somewhere I couldn't see. It necessitated a Win + Tab and closing it in the task

**TOP:** All that remains of your civilization. Be careful with it.

switcher before I could even get to the launcher and start the game. Hopefully this will be patched out once the new game's released.

## SPACED

The amazing thing, in 2023, is how fresh it all feels once you actually get into space. There was nothing like it in 1999, and relatively little to compare it to in 2015. There were plenty of RTS games in the '90s —*Age of Empires II* came out the same year—but they were earthbound things in which land, or occasionally water, units ran at one another in formations if you

## NEED TO KNOW

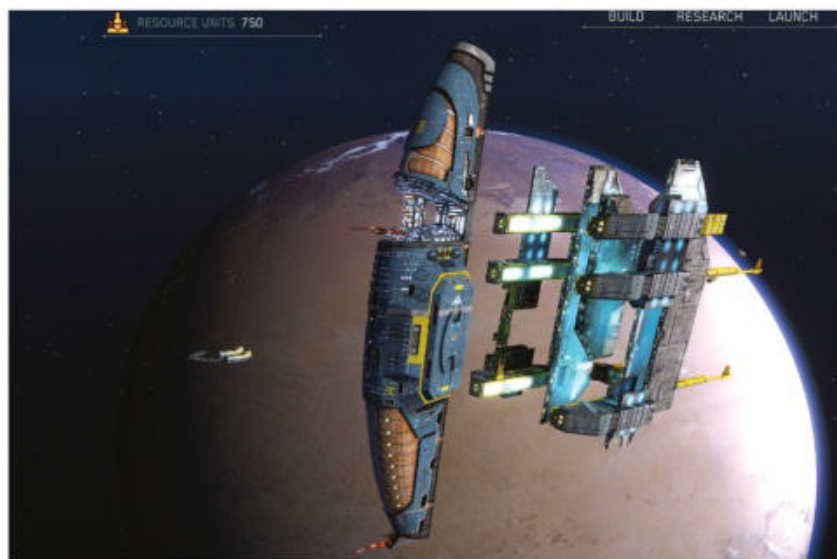
**RELEASE**  
1999 & 2015

**DEVELOPER**  
Relic Entertainment

**PUBLISHER**  
Sierra Studios

**LINK**  
[homeworldremastered.com](http://homeworldremastered.com)



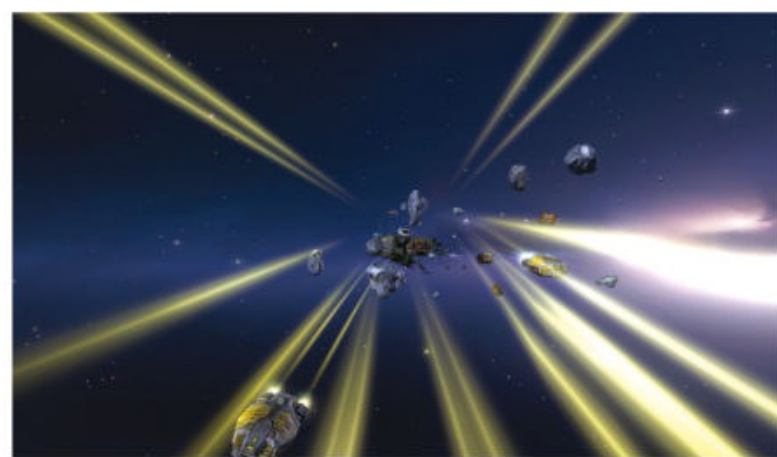
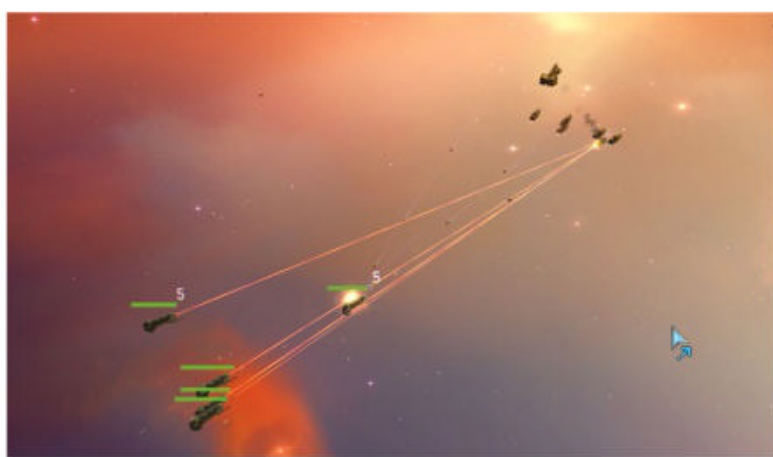


**ABOVE:** It's amazing what you can do if you work together.



About as close as the game gets to a human face.

**RIGHT:** Beam frigates! Attack!



were lucky, or individually if you were being forced to micromanage. The feeling of being in a 3D space in which you could spin the camera and examine your space fleet from any angle, was revolutionary. A modern graphics card helps enormously here, the Voodoo 3s and early Nvidia cards at the time tried very hard, and it was the ideal game for showing off what your PC could do, but being able to play the game in 4K today trumps all of that.

The problem with a true 3D space game is that it's complicated. Approaching a star base in *Elite Dangerous* from the wrong angle means not getting through the landing slot, so commanding a small force of fighters and frigates in *Homeworld* would be impossible, ships impossible to see or select because they were hidden behind a much larger craft, or just outside your viewport. Luckily you can set formations, select ships with a drag of the mouse as if they were

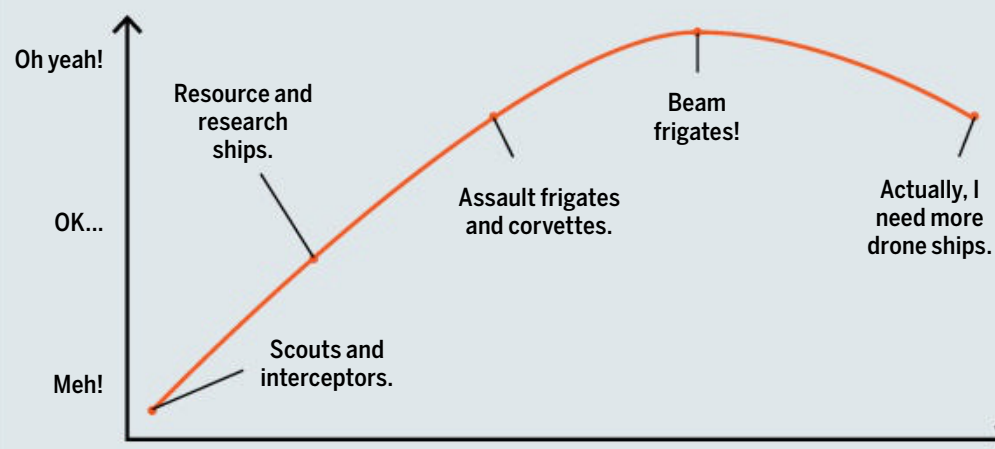
## KARAN S'JET SACRIFICES HERSELF TO BECOME FLEET COMMAND

icons on the desktop, or use the keyboard to select all combat ships and sic them on the enemy. It works, but with WASD bound to their own shortcuts, leaving the arrow keys and mouse to control the camera, the early missions are an exercise in getting to grips with the controls as much as testing your hyperspace drive. Rarely has there been a game in which the tutorials are so essential.

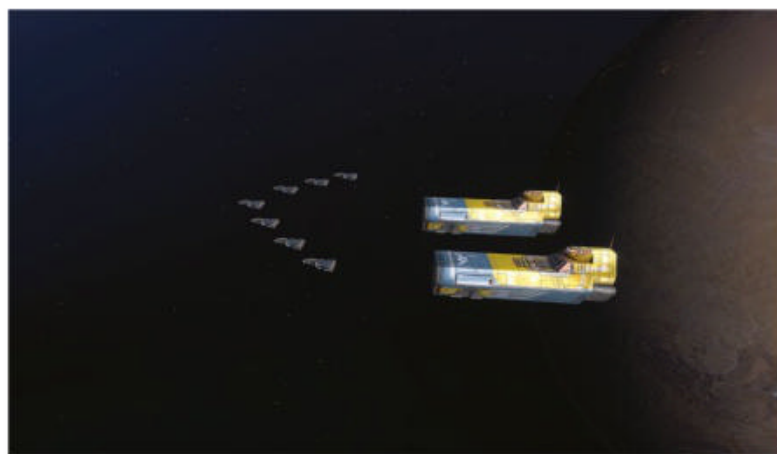
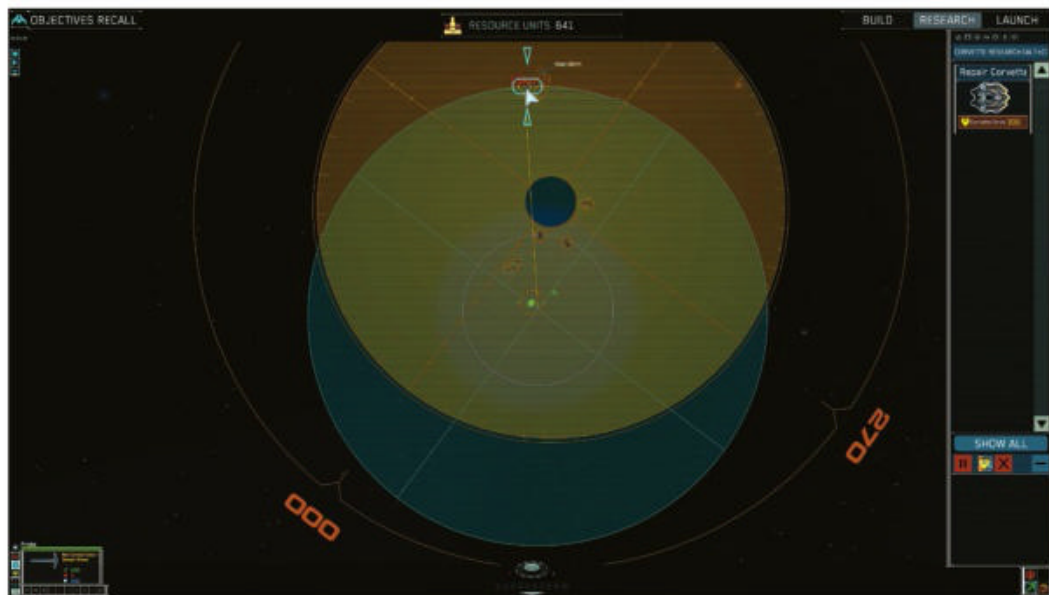
The story at first seems utopian. A set of warring clans on a desert planet dig up a crashed spaceship and with it a star map. This discovery unites the population and they spend 60 years building a mothership to take them to a place on the map marked as 'home'. Ten years before launch a resource ship sets off, just so it can be in the right place for a test of the hyperdrive. Karan S'jet sacrifices herself to become Fleet Command, merged in with the mothership's computers like a primitive Borg queen. It's all

## BUILD QUEUE

*The path to the beam frigate*







**FAR LEFT:** These resource gatherers are the key to your fleet.

**ABOVE:** An enemy that can take over your capital ships? Oh dear.

meticulously planned, and goes off without a hitch. Except the galaxy isn't amenable to the apparently benign exploratory ideas of the Kushan. They're attacked as soon as they leave their solar system, returning to their planet to find it razed, the remains of the population in orbiting cryopods that need to be defended. It gets worse, with the discovery that the Kushan are the bad guys, a former imperial power exiled to the desert world under penalty of death should they ever leave it. It

wouldn't be an RTS without a few enemies, and *Homeworld* pits an entire galaxy against you.

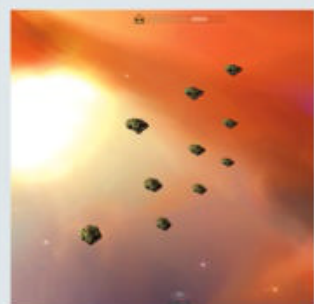
If you've ever seen the heartbeat telemetry chart from Apollo 11's landing, which shows Buzz Aldrin—who wasn't at the controls—barely breaking a sweat as Neil Armstrong manually pilots the craft down and lands on the goddamn Moon, you'll understand the vibe of the comms chatter. From the calm, smooth pronouncements of Fleet Command to the cool professional way your interceptor pilots

announce they're going after enemy craft, or resource collectors tip you off that they've run out of space rubble to mine, the sense in *Homeworld* is that you're in charge of a well-oiled machine. The person playing the game, however, is rarely following the example of Dr Aldrin. A panic unique to the RTS sets in as you race to keep up with all the things tugging at your attention, from build queues to repairs to that phalanx of red dots approaching.

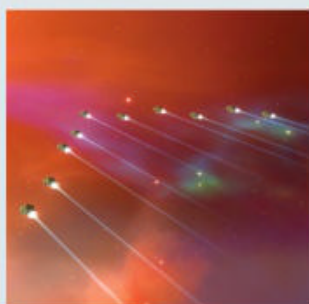
Happily, you get a decent range of toys with which to splat those red dots. You start with a few scout ships, which seem to be armed with the equivalent of muskets, taking so long between shots you can imagine the crew pouring powder down the barrel. They're effective to begin with, though, and open the door to heavy corvettes, guided missile frigates, the hilarious salvage frigates that can literally steal enemy ships and convert them to your side, and my favorite, the beam frigates, which are as close to glittering in the dark off the shoulder of Orion as you're going to get. There's a classic balancing act at play, with those beautiful beam frigates deadly against other large ships, but easily picked apart by a cloud of fighters, which

## FORM UP!

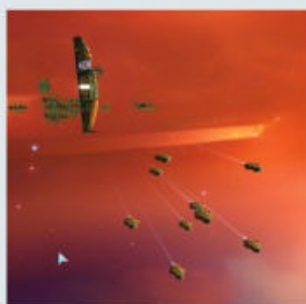
Group your ships in pretty ways



**1 THE WALL**  
The 3D equivalent to a line of riflemen. Effective against weaker enemies.

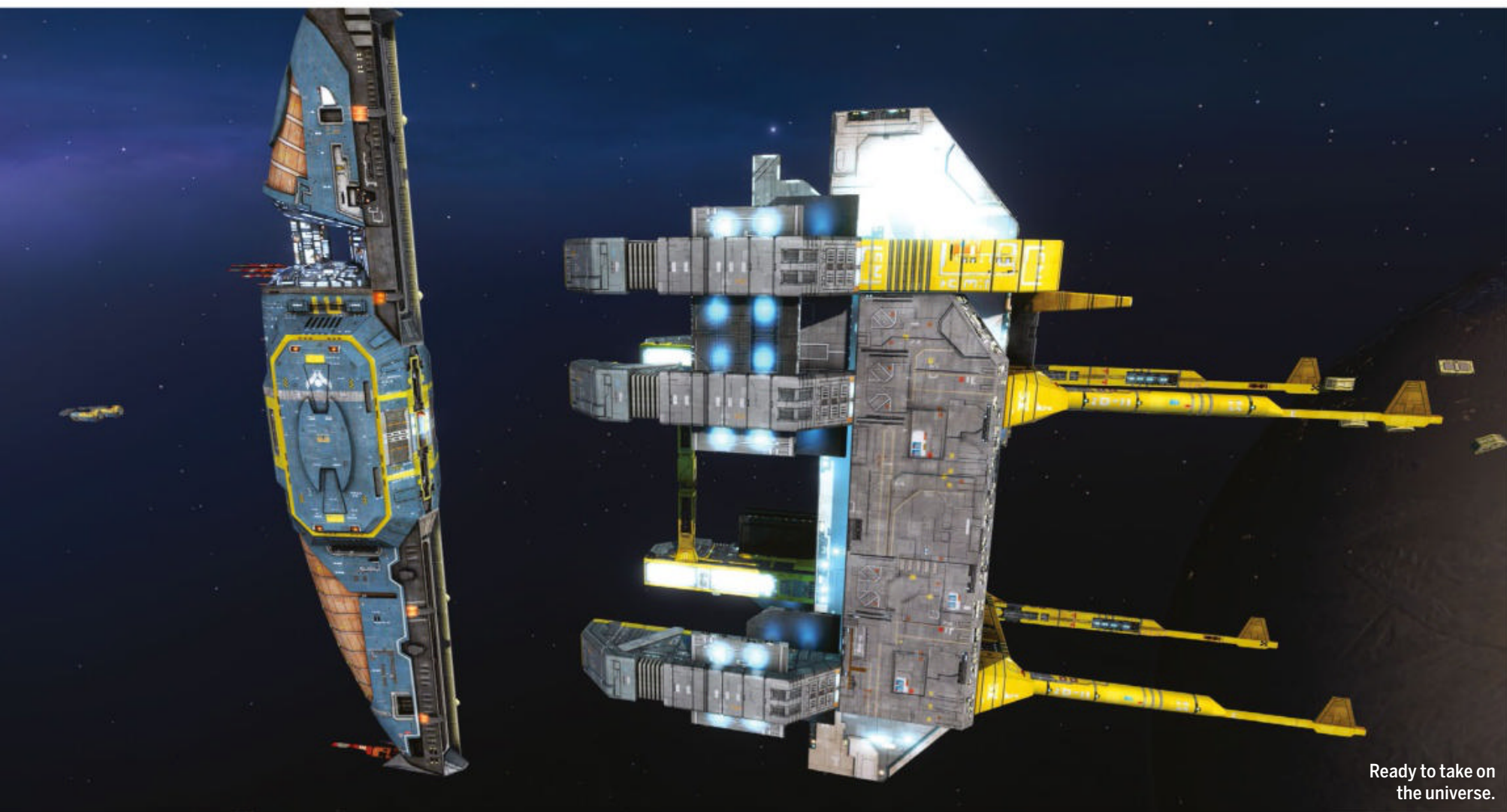


**2 THE DELTA**  
Looks damned cool when you're travelling to your destination.



**3 THE SPHERE**  
This one works best with a lot of fighters, otherwise it's just a jumble.





Ready to take on  
the universe.

you can guard against with drones or assault frigates, and so on.

### GOLDEN AGE

Playing *Homeworld* today drives one thing home hard: how good we have it. If this game were made today, it would have a control scheme adapted for a controller, visual lists of ships from which you could pick the ones you wanted instead of relying on keyboard shortcuts to choose idle combat units or resource collectors. The icons to switch between tactics and formations would be larger. You wouldn't have to hold Shift and the right mouse button—which is also bound to camera control—to choose options from a menu. Maybe you could zoom out to the tactical map using the mouse wheel rather than having to hit the spacebar. My favored screenshot button wouldn't have a command attached to it that centers the camera on the mothership.

And it would also be full of people. One of the reasons *Homeworld* has aged so well, and weathered the remastering process to come out the other side looking like a new game, is that it keeps its human figures to cutscenes. Human faces from this period are deep in

## YOUR VERTICAL HOME IS EASILY RECOGNIZED AMONG THE TRAILS OF FIGHTERS

the uncanny valley at best, and absolute nightmares at worst. *Homeworld* sidesteps this as everything in the game itself is a machine, a lump of metal built to be functional rather than beautiful, and for which it doesn't matter if they're entirely made out of flat edges, and the recesses in their skin are textured on instead of being built into the 3D mesh.

### SHAPE OF THINGS TO COME

Take the Kushan mothership. It has no need to fly in an atmosphere, so it doesn't need wings or a sleek aerodynamic form. It could have been an orbiting parking lot, the Flatiron Building or a school gym block. But its designers chose to make it a space banana, an interstellar almond croissant, or perhaps a boomerang—apt considering the way it goes out then comes back in the first few missions. It's a distinctive piece of design that rightfully made it to the cover art for

the game. In my memory it's bright yellow, but appears grey in the remastered game, with yellow highlights around the docking bay and what appear to be sections of wood paneling, though they might just be advanced space materials.

This shape also plays a role in the game. Despite being 3D, missions generally play out in a flat 2D plane, and your vertical home is easily recognized among the trails of fighters and the lances of beam frigates. Attack ships on fire are a common sight in *Homeworld*, but the trails they leave behind as they travel are another key part of its visual appeal. Not only do they help you to zero in on ships that might just be a point against the star field, but they allow you to differentiate between friends and enemies too.

The continued interest in the series that's led to *Homeworld 3* means it has never really left the collective PC gaming consciousness. The remastered edition did so much to make a classic playable again, and was much needed, but nine years after its release it's beginning to show its age, and a new *Homeworld*, full of the things that make gaming great today, feels fitting for a series now clocking up a quarter-century. ■



## PHIL SAVAGE



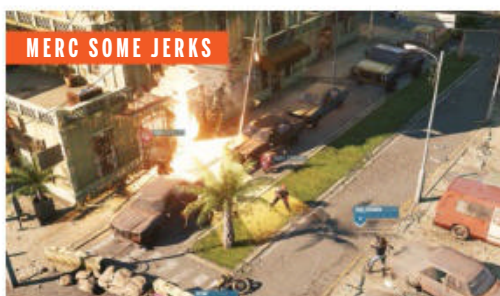
"Step right up," the travelling salesman yells, "I've got the cure for what ails you". The villagers are wary, but their interest is piqued. With a practiced flourish, he produces a pristine boxed copy of *No One Lives Forever 2*.



## COMMAND &amp; CONQUER: TIBERIAN SUN

[cncnet.org/tiberian-sun](http://cncnet.org/tiberian-sun)

→ Do you find this page stressful? Eight great games—'must plays', no less!—each and every issue. A backlog that would take many lifetimes to complete. Perhaps it would be better to just play *Tiberian Sun*. It's free, it's low-stakes, it's not even the best C&C.



## JAGGED ALLIANCE 3

[jaggedalliance3.thqnordic.com](http://jaggedalliance3.thqnordic.com)

→ I'm at the self-checkout, scanning a tin of plum tomatoes, when suddenly I remember that they actually did it. They made a worthy successor to the *Jagged Alliance* series—one that retains the essence of the early games, but with all the conveniences you've come to rely on.



## RHYTHM DOCTOR

[rhythmdr.com](http://rhythmdr.com)

→ Here's a single-button rhythm game. You press space on the seventh beat. The healthcare system is failing both doctors and patients thanks to the machinations of politicians who care more about power and profit than people. Here's a single-button rhythm game.



## AGE OF WONDERS 4

[paradoxinteractive.com](http://paradoxinteractive.com)

→ The thing about *Civilization* is that, for everything it does right, it fails to let you transcend mundanity and transform into a tree person. To be clear, this is also a failure of actual history. We'd do well to condemn our ancestors for refusing to ascend our species to a higher plane of being.

# MUST



# PLAY

**A PERSONAL LIST OF THE  
BEST GAMES YOU CAN  
PLAY RIGHT NOW**

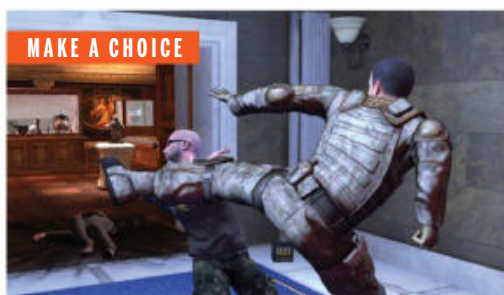
*by Phil Savage*



## HACKNET

[hacknet-os.com](http://hacknet-os.com)

→ It's surprising there aren't more games about hacking. It's such a perfect fit: high-pressure situations, plucky underdogs fighting against the system. But also, don't we all just want to spend some time rooting around other people's computers, seeing what weird shit they get up to?



## ALPHA PROTOCOL

[obsidian.net/games/alpha-protocol](http://obsidian.net/games/alpha-protocol)

→ Anyone can recommend a good game. "*Baldur's Gate III* is exceptional. You should definitely play it." Easy. Boring. I'm here to make the case for suffering. I'm here for *Alpha Protocol*, a mess of a game that always fails to meet the ambitions it suggests.



## ALAN WAKE 2

[alanwake.com](http://alanwake.com)

→ The most Remedy a Remedy game has ever been. *Alan Wake 2* has it all: a metaphorical TV studio in which Alan battles monsters while a musical of his life plays around him; a series of funny radio snippets that slowly reveal a sinister truth, and an obscene number of jumpscare.



## YAKUZA 5 REMASTERED

[yakuza.sega.com/yakuza5](http://yakuza.sega.com/yakuza5)

→ I was being presumptuous earlier, when I suggested this page was a burden. Maybe you're hungry for new distractions, having slipped the shackles of linear time. In which case, *Yakuza 5* is for you—the absurd, glorious folly that awaits after you've spent hours going through 0 to 4.



# HARDWARE

GET THE PERFORMANCE GAMES DESERVE

98

## GROUP TEST

Six PC gaming control pads reviewed and rated.

104

## TECH REPORT

Are we about to enter a post-x86 age?

106

## TECH TALES

The rise and fall of 3DFX, the OG of PC graphics.



108

## BUYER'S GUIDE

Build a great gaming PC no matter your budget.



*Group Test*

**I**t's tough to beat an official Xbox or PlayStation pad, even on PC. Millions of official controllers will be shipped out to players during a console generation's lifespan, and those sorts of economies of scale cannot be easily matched by any third party. Though there are many options out there that attempt to deliver something different, but are any of them worth it?

The difficulty trying to compete with Xbox or PlayStation is trying to match prices and quality. It's easy enough to do one or the other. You can find heaps of cheapo controllers that sell for far under the asking price of an official Xbox Wireless Controller, though few anywhere close to it in quality. At the other end of the market, you'll find companies like Razer, Nacon and Scuf with their own high-end offerings. Though be prepared to pay five times as much for high levels of customization.





## GROUP TEST

# CONTROLLERS

Sony and Microsoft make a mean controller, but is there a better alternative for a PC gamer?

*By Jacob Ridley*







# Wireless Controller

XBOX \$53

## Tough to beat

**1** The Xbox Wireless Controller sets the standard for all gamepads. It's such a well put together device that I have hardly any qualms with it. That's why it's so tough to find a controller more worthy of your money than this: it's tough to beat Microsoft at its own game. Microsoft has a vested interest in making sure the Xbox controller looks good, feels good, and lasts a while. It's shipping out heaps of them alongside its consoles, and us PC gamers are benefiting from those sorts of economies of scale. Beyond that, most games play nicely with an Xbox pad plugged

into your machine and there's further integration with Xbox on Windows, too. Though it's not perfect. You still have to buy an adapter to connect over Microsoft's proprietary wireless connection, otherwise you'll need to settle for Bluetooth, which often adds latency. It's also battery powered, which sort of saves having to deal with a dud battery in an otherwise good controller, but does mean you can go through the AAs quickly.

**PC GAMER** VERDICT

- High quality
- Comfortable
- Dongle sold separately

**SPECS** CONNECTIVITY: WIRELESS (BLUETOOTH, XBOX WIRELESS) / **STYLE:** ASYMMETRICAL / **AUDIO SUPPORT:** 3.5MM JACK / **PLATFORMS:** PC/XBOX

# DualSense

SONY \$50

## Symmetrical sticks

**2** You can divide the world into two halves: those who like the symmetrical thumbsticks found on a Sony-designed controller and those who really don't. I fall into the pro-Sony camp—I often feel like I am more in control of my controller with my thumbs up against symmetrical sticks. The debate over Sony's controller design has been raging for decades, so let's talk about some other positives. It's a tough call to say which of Sony or Microsoft has the better feeling controller, but I dare say Sony takes the win for me. There's just something so pleasing about the

weighty design of a DualSense controller. Though, like Microsoft, Sony doesn't get everything right. For one, the battery on a DualSense sucks, and you'll often end up in a situation where you're charging it between every gaming session, or reaching for a cable midway through. Though that's not as much of an issue on PC, as you'll likely be using this controller wired up anyway. Bluetooth is your only option for cable-free gaming.

**PC GAMER** VERDICT

- Superb quality
- Bluetooth/wired on PC
- Battery is lacking

**SPECS** CONNECTIVITY: WIRELESS (BLUETOOTH) / **STYLE:** SYMMETRICAL / **AUDIO SUPPORT:** 3.5MM JACK / **PLATFORMS:** PC/PS5



# ONE OF THE BETTER CONTROLLERS FOR COMFORT AND COMPACTNESS



## GROUP TEST

### Envision Pro

SCUF **\$180**

#### Sleek as heck

**3** Scuf positions the Envision Pro as a controller made for the PC platform, and I believe it. Not only is this thing actually designed for the PC, and offers tons of quick shortcuts and media keys in lieu of a keyboard, Scuf actually demands you install parent company Corsair's iCUE app on your PC.

It's not that iCUE is a bad app—t's not—but having to install it even to use the controller's most basic functions is a bit much. At least the Envision Pro makes up for it with otherwise excellent PC gaming credentials, like adjustable

triggers, clicky switches and convenient rear paddles.

Though the weird side paddles that sort of straddle either edge of the controller? I'm not a fan of those. It's more that I've resorted to turning them off as I keep clicking them accidentally. I appreciate what Scuf has done here, however. A PC controller that wasn't originally made for console, but I'm finding myself reaching for this pad over the rest.

#### PC GAMER VERDICT

- Clicky D-pad
- Tons of customisation
- Requires iCUE

**SPECS** CONNECTIVITY: WIRELESS (BLUETOOTH, 2.4) / **STYLE:** SYMMETRICAL / **AUDIO SUPPORT:** 3.5MM JACK / **PLATFORMS:** PC

### KingKong 2 Pro

GULIKIT **\$70**

#### Switch it up

**4** You might not know much about GuliKit, but I can tell you that the firm makes a mean Hall effect thumbstick. Not only does the KingKong 2 take the crown for 'best thumbsticks' of the whole lot I've tested, but my Steam Deck is also now fitted with GuliKit Hall effect switches, and they're pretty sweet too. It's also deserving of praise for its compact design. It's definitely one of the better controllers for comfort and compactness, perhaps because it's made with the Nintendo Switch in mind. Though the rest of the KingKong 2 isn't quite up my alley.

The connectivity isn't ideal for a PC gamer, as you're limited to Bluetooth alone and it's not always up to par with other dedicated wireless connections. The rest of the buttons on this controller, namely the face buttons, don't feel as good as others I've tested either. That's a bit of a shame, as there are many positives for any gamer dual-wielding a PC and Switch, myself included, about the KingKong 2.

#### PC GAMER VERDICT

- Great for PC+Switch players
- Top Hall effect sticks
- Bluetooth wireless only

**SPECS** CONNECTIVITY: WIRELESS (BLUETOOTH) / **STYLE:** ASYMMETRICAL / **AUDIO SUPPORT:** NONE / **PLATFORMS:** PC/SWITCH/ANDROID





**A GREAT OPTION  
FOR ANYONE WHO  
PLAYS ROUGH OR  
TENDS TO END UP  
WITH STICK DRIFT**



6

## WHY USE A CONTROLLER ON PC AT ALL?

It might pain some to admit, but some PC games play better on a controller than a keyboard and mouse. There are some obvious controller candidates, namely the game formerly known as *FIFA*, though also *Elden Ring*, a game primarily devised for console. *Alan Wake 2* is a more recent game that just feels better to play with a controller in hand, and I'm always reaching for my pad for any *Assassin's Creed* title.

The good news is that most console controllers from a time when USB was a thing will work on a PC, either via a cable, Bluetooth, or in Microsoft's case an official dongle. If you have one lying around already, you're pretty much sorted without having to spend any extra cash. Though for someone looking to make their controller experience as luxurious as playing with their mechanical keyboard and gaming mouse, I'd recommend looking at the Nacon or Scuf options noted in this group test instead.



## Revolution 5 Pro

NACON \$200

### Customization king

**5** The Nacon Revolution 5 Pro may be more of a console controller, but that's never stopped us before. It's arguably a better controller on PC, actually, as it doesn't offer full vibration on Sony's latest box.

This controller's main selling point are the fantastic Hall effect thumbsticks and triggers. These are what make it a great option for anyone who plays rough or tends to end up with stick drift in more weak-willed pads. They essentially get rid of the more flimsy connection that causes issue in traditional thumbsticks and instead harnesses the power of magnets to keep these sticks

as responsive and accurate as possible for longer. They work great, as the Nacon's sticks are some of my favorite of the lot, second only to the GuliKit.

You can really make this controller your own with all the interchangeable parts and the heaps of well-placed customizable buttons. Though I'm not a huge fan of its construction: while decent, it still feels cheaper than I'd like it to for this much money.

#### PC GAMER VERDICT

- Highly configurable
- Chunky, in a good way
- Feels cheaper than some

**SPECS** CONNECTIVITY: WIRELESS (BLUETOOTH, 2.4) / **STYLE:** ASYMMETRICAL / **AUDIO SUPPORT:** 3.5MM JACK / **PLATFORMS:** PC/PS4/PS5

## Afterglow Wave

PDP \$38

### Budget with style

**6** Nowadays you can get a lot from a third-party controller. Take this PDP Afterglow Wave: it's not only stacked with key functionality, including a removable USB Type-C cable and a 3.5mm jack for your headphones, but it's also lit up like Times Square on New Years Eve. You can control the RGB lighting through the PDP app. Though you need an account to use the app, which I'm not a fan of. This is sadly the way of the hardware world nowadays. The app is actually rather good, however, with plenty of options for dead zone configuration, audio adjustments, and lighting.

If it were rubbish and had to sign up to access it, I'd really be upset.

Though you have to really love the look of the Afterglow to want to pick one up. Otherwise it shares a whole lot with the official Xbox pad. It feels that little bit cheaper in construction, however, and the buttons nowhere near as nice. That's fine, as it is a cheaper product, but I'd still rather splash out on the official pad for all the subtle ways it feels more well-polished.

#### PC GAMER VERDICT

- Stands out
- Type-C connection
- App requires a login

**SPECS** CONNECTIVITY: WIRED (USB TYPE-C) / **STYLE:** ASYMMETRICAL / **AUDIO SUPPORT:** 3.5MM JACK W/ MIC MUTE BUTTON / **PLATFORMS:** PC/XBOX



Maybe the path forwards lies in AI, or quantum computing, rather than a new instructional architecture.

# THE CHIPS ARE DOWN

Is the response to **APPLE'S M1** about to usher in a post-x86 age?

**I**t's got remarkable staying power, the PC. By rights it should have gone the way of the Betamax years ago, somewhere between the PS2's stratospheric popularity and ARM-powered smartphones invading the gaming space with an army of disgruntled avians, clashing clans and brain-dissolvingly stupid ads. But it hasn't.

And until quite recently, it's been obvious why the traditional arrangement of discrete componentry running on the same old architecture has endured. Windows is where gaming happens on PCs, and Windows is an x86 or x64-based OS. That means you need a CPU with very specific architecture extensions—which Intel and AMD hold exclusive rights to—in order to run games on Windows. Intel and AMD want you to keep buying and periodically upgrading CPUs, so dedicated CPUs stick around.

The culture around graphics cards has helped desktop PC gaming's sticking power, too. We're somehow happy to drop \$1,000 or more on a single component now, and to do it every few years, because PC gamers have an intrinsic understanding that upgrading a GPU brings big performance gains in-game. Even if we're being price-gouged, we still want to retain the freedom to keep upgrading the graphics component, without having to re-buy any other parts. With the honorable exception of an

absolutely honking PSU, of course, which we'll generally opt for with RGB lighting because PC gaming.

Upgrading your machine, taking ownership of your hardware, and more recently even using it as a means of self-expression by customizing its visual elements, is central to the platform. In car tuner culture, it's not just about driving the car. It's about the way it looks while you drive it. And we've adopted that, one RGB cooling pipe at a time.

For all these reasons—ease of upgrades, visual customization, sick lighting schemes—it hasn't been particularly attractive to replace PCs with something like a Mac Mini.

## INCREDIBLE EFFICIENCY

Here's the thing: it makes increasingly less sense to keep manufacturing PC hardware this way. Since Apple Silicon launched its M1 chips in 2020, the conversation about its incredible efficiency has been getting steadily noisier.

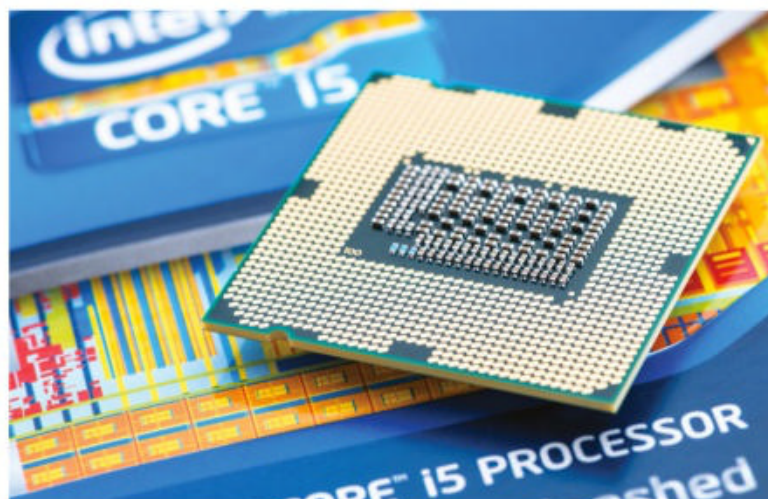
M1 is an SOC architecture, a system on a chip. Intel's last few generations are SOC's too, but their architecture doesn't go as far as Apple's: an eight-core GPU sits on the same PCB as four 'performance' cores, four 'efficiency' cores, a 16-core neural engine and eight LPDDR4X channels. In the simplest terms possible, it's taking the different parts of a traditional PC and cramming them onto the same piece of silicon, then generating performance numbers to make an Intel exec



## Quantum leap

What about quantum computing? Google's hard at work at refining the technology with its Sycamore project, and by all accounts making tangible progress. But that doesn't mean you'll be swapping your Core i9 for a qubit processor just yet. Quantum computing relies on sub-atomic particles. Those particles exhibit phenomena like superposition. The problem? Sub-atomic particles are a bit fussy. Quantum computers require cooling apparatus the size of a large room to operate.





**FAR LEFT:** Right now Apple Silicon doesn't seem like a threat to PC gaming. Still, those power draw figures...

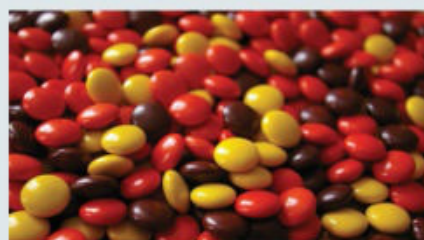
**LEFT:** It's been the foundation of desktop CPUs forever, but backwards compatibility is hurting x86 chips.

## '78 CLASSICS *Four things as old as x86*



### CABBAGE PATCH KIDS

The inexplicably misformed dolls entered toy shops in 1978, the same year that the x86 architecture first hit IBM PCs.



### REESE'S PIECES

Peanut butter. Sugar. Additives. It seems so obvious. Why did no one think of these before the late '70s?



### LASERDISC

The butt of every outmoded technology joke. Your dad still has a few in the loft which he will never, ever sell.



### ASHTON KUTCHER

Starred in *The Butterfly Effect*, Punk'd countless celebs and married Demi Moore. Meanwhile, what's x86 done?

furrow their brow. Apple calls it the world's fastest CPU core. But then, it would, wouldn't it.

Of course, Apple's in a unique position to usher in a massive change to CPU architecture this easily because it makes both the hardware and the OS. There's no complicated licensing to navigate, or any concessions to other manufacturers to make rival components for the same chipset. Apple's closed ecosystem, as the Steve Jobs acolytes kept telling us for years, has definite benefits.

Still, the M chips' power and efficiency is enough to turn even the beige of PC devotees' heads. They deliver higher performance at lower power than equivalent Intel chips, and are simultaneously a powerful and efficient GPU that takes Intel and AMD's integrated graphics to town.

## BREAKTHROUGHS

Meanwhile, it's getting harder for PC's big two to make breakthroughs with die shrinks. x86-based chips are still theoretically able to run software written for the original IBM PC, and they devote a lot of silicon space to maintaining that compatibility with instructions that were written in the late '70s.

The current plan for more powerful desktop CPUs is stacking dies. But much like balancing bits of rubbish in an increasingly precarious pile instead of just taking the bins out, it has a limited timespan of effectiveness. At a certain point, the power draw and thermal output from all those cores in close proximity will become untenable.

Intel and AMD are aware of this, of course. They're both constantly innovating to deliver more efficient chips with integrated graphics in the laptop market, and they've both

made noises about non-x86-based desktop SOC's in the past. It feels like we might be looking at a departure from x86-based systems sooner rather than later.

Intel Itanium nearly paved the way for a post-x86 future. Hewlett Packard wanted a chip that let software determine the order it performed instructions in, to a much greater extent than x86 allows. The big idea was that this would free up more resources for instructions to be performed in parallel, and ultimately *Return to Castle Wolfenstein* would run a bit faster on your PC. This was back in 2001, you see.

HP worked with Intel on its EPIC architecture, and that collaboration led to Itanium chips. Even Microsoft believed in it, writing a version of Windows specifically for it. Why did it fail? Because it's way harder to write CPU instructions in the detail Itanium needed than anyone realized. The performance gains simply weren't materializing, meanwhile AMD launched

64-bit Opteron chips that beat Itanium on performance and had x86 system compatibility.

Lessons have been learned the hard way, then, and that means Intel and AMD will ease very gradually into post-x86 SOC territory. If they're going to at all.

Because this is all looking at the future without all the unknown-unknowns. AI's already made a craterous impact on culture within 12 months, and ChatGPT comes as standard on car dashboards now. We've seen what deep learning can do for graphics processing via Nvidia's Turing cores and DLSS's impossible to conceive wizardry. Perhaps the future of PC gaming is Skynet, not SOC's. ■

**Phil Iwaniuk**

## THE CURRENT PLAN FOR MORE POWERFUL DESKTOP CPUS IS STACKING DIES



# VOODOO PEOPLE

The rise and fall of **3DFX**, the OG of PC graphics

**I**t feels as though Nvidia and AMD have been locked in perpetual combat since the late bronze age. Every Steam hardware survey you've ever looked at, the green line and the red dominate, leaving the thinnest sliver for 'other'. But there was once a graphics giant who stood taller than all the rest. From 1996 to 2000, 3DFX ruled the PC hardware market.

We remember it now for three things: Voodoo graphics cards, the cool adverts that sold us them, and Glide, an API that made 3D games run at faster frame rates than we'd ever known. OK, maybe four—the logo was pretty cool too, and it appeared before every game menu for a while back then.

But that's understating the impact the Californian company had on gaming. Without 3DFX, we wouldn't have enjoyed that golden age of early 3D graphics through the mid-to-late '90s. It's about time we all paid our dues to the company that once provided the silicon that powered our most mind-melting gaming moments, before its \$50k monthly lunch budgets and doomed console deals caught up with it and caused the company to disappear as quickly as it had arrived.

It all began in San Jose in 1994, when three former Silicon Graphics employees, Ross Smith, Scott Sellers, and Gary Tarolli, spotted a business opportunity. This gaming stuff was doing quite well, and perhaps the arcade machine market might be interested in the trio's expertise in 3D graphics chips. The appropriately named Voodoo Graphics 3D chip was a big success in arcades, powering titles like *San Francisco Rush* and *Wayne Gretzky's 3D Hockey*.

And then in the tail end of 1995, the price of memory dropped significantly. That meant that 3DFX was suddenly able to afford to manufacture a consumer graphics chip. At that time companies including ATI and Matrox were

experimenting with 3D accelerators, but nobody had yet established an API standard that all game developers could get behind and add support to in their titles. id Software's games solved that by handling graphics on the CPU, but all that was about to change.

## THAT YOU DO

Along came the Voodoo Graphics card (the Voodoo 1 to us revisionist historians) in October 1996. Priced lower than its rivals, with benefits like a z-buffer and anti-aliasing, it used 3DFX's own Glide API. For PC gamers at the time, it was immediately absolutely essential hardware.

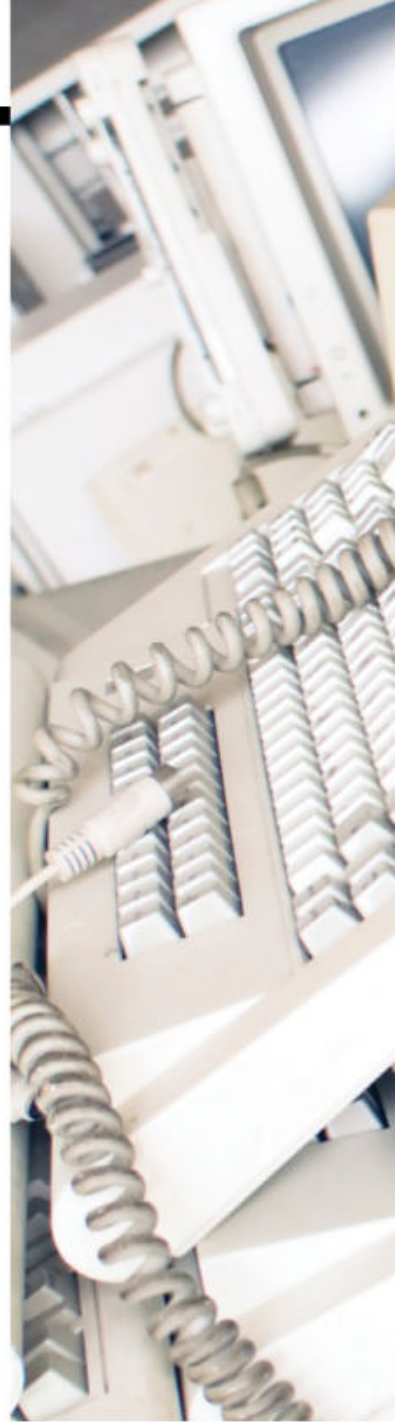
By 1997 the Voodoo had established 3DFX as the major player in the PC graphics market, muscling out ATI and Matrox. The company followed it up with the Voodoo Rush in 1997, and the legendary Voodoo 2 in 1998. During this time, id Software and 3DFX worked

together on a version of Quake that supported OpenGL. That prompted 3DFX to write MiniGL, a new API that allowed OpenGL commands to work in Glide.

If you've read this far, you probably had a Voodoo card of your own. It's hard to convey how transformative it was to switch from the software renderer to Glide in a graphics menu and see your game utterly transformed. It was akin to skipping forwards two console generations with one mouse click. *Cyberpunk 2077* looks nice enough, but it's no *Ultimate Race Pro* running on a Voodoo 2 after looking at the software-rendered version for weeks previously. The aggressive pricing made 3DFX cards ubiquitous, and that made it a no-brainer for developers to add Glide support. In a very real sense, 3DFX sped up the 3D graphics revolution.

But the graphics chip that burns twice as bright burns half as long. And while PC Gamer doesn't condone running silicon at flammable temps, the proverb holds true in 3DFX's case. Two heavy blows knocked the company into financial trouble

## IN A VERY REAL SENSE, 3DFX SPED UP THE 3D GRAPHICS REVOLUTION



**PHIL IWANIUK**  
Office 'character' Phil Iwaniuk spent most of this month brewing potions out of printer toner and Wite-Out while reciting old cheat codes from *Quake II*. Whatever keeps him off the streets.

## POLY AMOROUS *Four games that heralded the 3D graphics revolution*



**STAR WARS: X-WING 1993**  
Not the first space combat game to use 3D polygonal graphics, but the first one that people actually played. A thrilling glimpse of the future.



**QUAKE 1996**  
Made *Doom*'s sprite-based 3D graphics from three years earlier look like an etch-a-sketch. You just had to play it. And then play it again on Glide.



**UNREAL 1998**  
The very first version of Unreal Engine came with a first-person shooter on the disc too. One whose atmospheric lights and reflections led to wild overscoring by critics.



**OUTCAST 1999**  
An oddball game engine that melded ray-casting with a texture mapping polygonal engine to render the objects within its environments. French. Enigmatic.





during the late '90s, starting with a planned collaboration with Sega to provide the graphics chip for the Dreamcast. It never happened. Sega purchased the IP rights to the chip 3DFX developed, but elected to use NEC's graphics hardware instead. Lawsuits ensued.

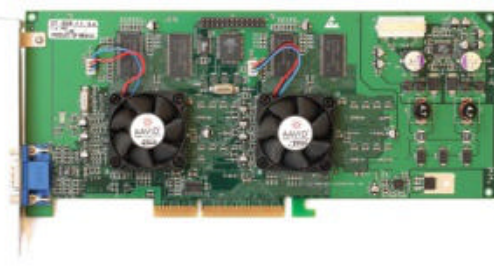
Perhaps even more damaging was Microsoft's Direct3D release. A new, OS-native API that worked across graphics cards from multiple manufacturers really dented Glide's usefulness, and 3DFX started to see its market share retreating as the new millennium drew near. It had also acquired STB Systems to manufacture Voodoo-branded cards rather than selling the chip to OEM manufacturers, while newer generations of Voodoo cards stacked up less favourably against rivals and, by the time of the Voodoo 5, sales had plummeted.

3DFX called time in 2000. Nvidia bought the company in December of that year. The following two-and-a-bit decades would see a two-horse race in the graphics market, but 3DFX walked so that AMD and Nvidia could run each other out of business. ■

**Phil Iwaniuk**

**ABOVE:** Try not to think about the number of Voodoos currently in landfill.

**BELOW:** If you played games between 1996 and 2000, you saw this logo a lot.





# BUYER'S GUIDE

Build the best PC for your budget



## KEY

### *Budget build*

PC gaming is for everyone. Pick the parts you want to build a new, well-rounded PC for a good price.

### *Mid-range build*

You want to run every new game at 1080p 60fps. This recommended build will see you through.

### *Advanced build*

You're looking for the best PC on the market and superior components. But you still want to spend smart.





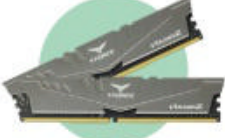





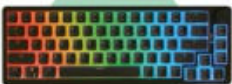




# BUDGET BUILD

Enjoy 1080p gaming without breaking the bank



TOTAL  
\$1,106

MOTHERBOARD		<b>B660M Pro RS</b> ASRock <b>\$100</b> This is as cheap as we want to go while still offering room for expansion and upgrades down the line.
PROCESSOR		<b>Core i5 13400F</b> Intel <b>\$208</b> Intel's added four more cores to its entry-level Core i5 and it's become even more fantastic value.
GRAPHICS CARD		<b>GeForce RTX 4060</b> Nvidia <b>\$300</b> The cheapest way to score Nvidia's latest gaming architecture and DLSS 3 support.
COOLER		<b>Laminar RM1 (included with CPU)</b> Intel <b>Free</b> There's room for an upgrade here, but on a budget the included CPU will work just fine.
MEMORY		<b>T-Force Vulkan Z 16GB</b> Teamgroup <b>\$33</b> Goodbye 8GB, hello 16GB of speedy DDR4-3200.
POWER SUPPLY		<b>Pure Power 12 M 550W</b> Be Quiet! <b>\$95</b> We have to run a 550W PSU for the RTX 4060, as per Nvidia's recommendations.
SSD		<b>WD Black SN770 500GB</b> Western Digital <b>\$33</b> It's finally time to ditch SATA and go for an NVMe drive even in a budget machine such as this.
HDD		<b>WD Blue 1TB 7200rpm</b> Western Digital <b>\$32 (not in budget)</b> You don't need an HDD (we haven't included it in the total cost) so feel free to cut this to save cash, but one sure helps with storage.
CASE		<b>Zauron</b> Aerocool <b>\$60</b> This Aerocool will let your components breathe and has space for further expansion and cooling.
DISPLAY		<b>Mobiuz EX240</b> BenQ <b>\$160</b> You can get an excellent gaming monitor for not a huge sum of cash nowadays, and this BenQ is our favourite on a budget.
KEYBOARD		<b>KM250 RGB</b> G.Skill <b>\$40</b> It's actually mind blowing what you can pick up for this little cash: A hot-swappable mechanical board that looks lovely.
MOUSE		<b>G203</b> Logitech <b>\$30</b> A classic shape delivered in a sleek shell, this mouse fits all hand sizes and grips.
HEADSET		<b>HS55 Stereo</b> Corsair <b>\$47</b> Corsair's budget cans are comfy and have a surprisingly excellent microphone for the money.









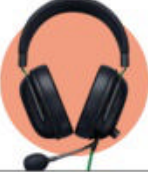


# MID-RANGE BUILD

Our recommended build for playing the latest games



TOTAL  
\$1,568

MOTHERBOARD		<b>B660M Mortar WiFi</b> MSI <b>\$160</b> This MSI board delivers everything we need in a compact package and allows us to use much cheaper DDR4 memory.
PROCESSOR		<b>Core i5 13400F</b> Intel <b>\$208</b> Yes, this is the same CPU as the budget build. It's simply too good value to miss and perfect for high fps gaming.
GRAPHICS CARD		<b>RX 7700 XT</b> AMD <b>\$449</b> If you can spare the extra cash, the RX 7800 XT is a tantalising upgrade. Nevertheless, we'll opt for AMD's cheaper card.
COOLER		<b>Laminar RM1 (included with CPU)</b> Intel <b>Free</b> Intel bundles a redesigned CPU cooler with some 13th Gen processors. This little chip chiller will serve us well for a while
MEMORY		<b>Vengeance LPX 16GB DDR4-3200</b> Corsair <b>\$40</b> With plenty of capacity at 16GB, this unembellished memory has everything you need for gaming and more.
POWER SUPPLY		<b>Pure Power 12 M 650W</b> Be Quiet! <b>\$105</b> This larger Be Quiet! PSU offers a stable platform with modern PCIe 5.0 connectivity.
SSD		<b>WD Black SN770 1TB</b> Western Digital <b>\$51</b> There are faster PCIe 4.0 drives, but this is the best value for money SSD around.
HDD		<b>WD Blue 1TB 7200rpm</b> Western Digital <b>\$32 (not in budget)</b> Just like in the budget build, this HDD isn't strictly necessary, but for a pretty low price it's nice to have plenty of extra space.
CASE		<b>H7</b> NZXT <b>\$130</b> It's very clever of NZXT to design such an easy PC case to build into, and make it look so gorgeous too.
DISPLAY		<b>S2722DGM</b> Dell <b>\$270</b> With a snappy 165Hz refresh rate and a 1440p resolution, this Dell is an enviable blend of monitor performance.
KEYBOARD		<b>KM250 RGB</b> G.O.Skill <b>\$40</b> You could spend more for a full-size gaming keyboard, but this G.Skill will certainly suffice for most gamers.
MOUSE		<b>DeathAdder V2</b> Razer <b>\$50</b> Tried and tested, this Razer mouse is a superb companion for competitive gaming without breaking the bank.
HEADSET		<b>Blackshark V2</b> Razer <b>\$65</b> The Blackshark V2 offers up some killer audio quality to rival the greats. And at a reasonable price too.








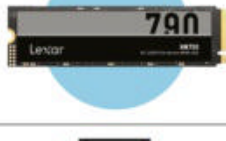







# ADVANCED BUILD

Go above and beyond with a PC powerful enough to end worlds



**TOTAL**  
**\$5,739**

MOTHERBOARD		<b>MEG X670E Ace</b> MSI <b>\$699</b> There are cheaper X670 boards than this, but we're going extreme and this is one of the most fully featured around.
PROCESSOR		<b>Ryzen 9 7950X3D</b> AMD <b>\$682</b> AMD's 3D stacked chips are awesome for gaming, thanks to heaps of cache. This Ryzen 9 is the best of the bunch
GRAPHICS CARD		<b>GeForce RTX 4090 Founders Ed</b> Nvidia <b>\$1,660</b> The RTX 4090 is immense, in every way. The performance it offers is unmatched by any GPU out there.
COOLER		<b>Kraken X63</b> NZXT <b>\$170</b> One of the most stunning AIO coolers rebuilt with an updated pump, LGA 1700 bracket, and RGB lighting for more pizzazz.
MEMORY		<b>Trident Z5 RGB 32GB</b> G.Skill <b>\$110</b> This is a new memory standard for a new era of memory speed. DDR5 is blisteringly and fantastically quick.
POWER SUPPLY		<b>Prime TX-1000</b> Seasonic <b>\$310</b> An ATX 3.0 PSU would also be good here, but we've tested this Seasonic and know it's worthy of such a build.
BOOT DRIVE		<b>WD Black SN850X 2TB</b> Western Digital <b>\$120</b> We're sticking with PCIe 4.0 here, and WD makes a mean PCIe 4.0 SSD. The SN850X is its best to date, and 2TB is plenty.
DATA DRIVE		<b>NM790 4TB</b> Lexar <b>\$189</b> With 4TB of storage, it's going to take one seriously big Steam library to get anywhere close to filling this drive up.
CASE		<b>5000D</b> Corsair <b>\$155</b> We swear this stylish mid-tower is bigger on the inside. It's the PC equivalent of the TARDIS.
DISPLAY		<b>34 QD-OLED (AW3423DWF)</b> Alienware <b>\$1,099</b> You could be much more sensible on your screen than this. For this build, however, we only want the best.
KEYBOARD		<b>ROG Azoth</b> Asus <b>\$240</b> This keyboard's secret? Lubed switches. Don't knock it until you've tried it. It's also wireless and very well made
MOUSE		<b>DeathAdder V3 Pro</b> Razer <b>\$150</b> With a lengthy battery life and a phenomenal sensor to keep you gaming at your best, the G502 is undoubtedly one of the finest.
HEADSET		<b>Cloud Alpha Wireless</b> HyperX <b>\$155</b> If you've settled on a wireless keyboard and mouse, the last thing you want is a pesky cable to your headset.



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# HOMEWORLDS COMPARED

Your interstellar guide to the PC Gamer and Console Gamer homeworlds

## PC GAMER HOMEWORLD



### Hardware heaven

On the PC Gamer homeworld all gamers play on awesome, pimped out rigs loaded with top-class GPUs, CPUs, RAM and accessories. Games are played at high resolutions and framerates.



### Maximum software choice

PC gamers get an unlocked full catalog of games, with exclusives locked to another platform simply not a thing. From the freshest indie games to AAA blockbusters, PC gamers get access to all games.



### A world of mods

PC gamers can modify their games as they see fit, with fantastic free add-ons and improvements for games released daily. PC gamers are empowered to flex their creativity and everyone benefits.



### Elite portables

Portable PC gaming on the PC Gamer homeworld is also best in class, with the most powerful handheld portable PCs letting PC gamers play their favorite games on the go in high fidelity.



### No platform wars

The PC Gamer homeworld is also a peaceful planet that doesn't suffer from the 'everyone loses' console wars that turn gamer against gamer and restricts choice of games due to exclusivity deals.

## CONSOLE GAMER HOMEWORLD



### Hardware hell

On the Console Gamer homeworld all hardware used to play games is compromised in some way, with console gamers having to accept second best when compared to PC gamers.



### Limited software choice

Unfortunately, software selection on the Console Gamer homeworld is restricted. A lot of indie games never make it to console, while big AAA games are often locked to other console platforms.



### No world of mods

Console gamers have no ability to mod their own games. As such, if something is wrong with a console game on release they are left powerless to act or benefit from free additional content.



### Underpowered portables

Weak, compromised and limited handheld systems are rife on the Console Gamer homeworld. From machines running hardware that is going on a decade old, to half-assed streaming handhelds.



### Continuous platform wars

Finally, the Console Gamer homeworld is beset with bitter platform wars. Every night gamers can't sleep without hearing a rival console gamer shout, 'my console is better than yours'. Scary but true.

...UNTIL **FEBRUARY 20**



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